BACPAR

BRITISH ASSOCIATION OF CHARTERED PHYSIOTHERAPISTS
IN AMPUTEE REHABILITATION

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Welcome

Dear Colleagues and BACPAR members,

As we all know this winter has been a long one and Spring is all the more welcome. Amongst its joys, is your BACPAR journal!

A special welcome to new readers – we have a growing membership – and to BACPAR's new Journal Editor Sue Flute. Established members will appreciate that producing the journal twice a year is a tall order as her predecessor Lucy Holt expanded the journal's size and content considerably over the past three years. However it is up to all of us as members – executive or otherwise – to support Sue with this responsibility. Don't be daunted – there's writing styles to suit all, from the scientific to the 'chatty'. As members we value it all, from the evidence based (which we advocate) to a case study or simply a piece of news – its variety is the journal's appeal. I must have said this before…. it's a great CPD opportunity and hey, you might discover the bard in you! Above all we want to share and learn from good practice in amputee rehabilitation.

The committee met this month (February) and I was delighted to welcome new members, namely Alex Weden as Research Officer, Tim Randall who shares the Guidelines Co-ordinator role with Karen Clark (Diversity Officer) and Matt Fuller as Public Relations Officer. Several executive members have taken on additional roles e.g. Sue and Karen, and Julia Earle is Membership Secretary. There was a good turn out for the meeting which, combined with the small meeting room and a full agenda, prompted plenty of all round discussion, debate and positive decision making on your behalf.

One unanimous decision was the nomination of Louise Tisdale as BACPAR's new Chair. I am sorry to be stepping down now that my 3 year term is complete but delighted that BACPAR will be confidently and assuredly led by Louise. I wish her all the very best and hope she enjoys it as much as I have. Those of you at the AGM in Macclesfield know that I remain on the committee in my role as rep to SPARG (in order to best support Louise it was agreed I be vice-Chair for a short period).

Those of you who attended the AGM will have seen the list of BACPAR achievements for 2009 – impressive, I hope you'd agree. They are accounted for in the AGM minutes in this issue. Looking ahead to next year's AGM Louise will reflect on the success of BACPAR's 2009 study event – apart from some reservations over the venue it was otherwise another excellent learning opportunity. By the time you read this we will know more about this year's main CPD opportunity, it may be a joint event with ISPO UK, something the exec hotly debated. Whatever the outcome we have a working group at the ready to pounce into action!

Amongst the agenda items were BACPAR's 'work plan' and Service Portfolio.
For the past 2 years BACPAR has provided a provisional work plan to the CSP's Clinical Interest Group Liaison Committee (CIGLC) to inform other groups of our activities, to share experience and knowledge as relevant. Carolyn Hale, my predecessor as Chair, initiated the Service Portfolio and Ruth and I updated it recently (posted on ICSP amputee rehab network). Incorporated is the work plan – it looks daunting but much of it is ongoing work and routine activities. The intention is to update the SP and work plan on an annual basis for the benefit of members and for strengthening communications with the CSP.

One action of particular note and that has been turned around with speed and efficiency is the first version of the Outcome Measures' Toolbox. Led by Katharine Atkin, work started on this last Spring and it was launched at the exec meeting and is now to be disseminated to everyone by the regional representatives. Your feedback is wanted please.

The regional rep meeting at the Study event in November prompted an update of the regional reps' pack and the potential for links with the CSP 'English Networks'. BACPAR's rep for Wales is Vanessa Davies – MBE!! Vanessa, modest as ever, says she shares this award with many, BACPAR included. We are honored and proud! Another notable figure in amputee rehab this year (and its only February!) has been Danielle Freeth who received the CSP Support Worker of the Year Award in January. Co-incidentally at this year's AGM the exec will propose a further BACPAR membership category for CSP members who are support workers.

As retiring Chair it's gratifying to look back over the past 3 years and see how BACPAR continues to achieve, thrive and evolve. I've loved working alongside so many committed physiotherapists and MDT colleagues. I've had the opportunity to be involved, to a greater or lesser extent, in numerous projects from organising study events, contributing to guideline work, the toolbox, the femurette and the ppam aid developments, the website, iCSP consulting with other professional groups….and more besides, all with the ultimate aim of supporting members and promoting best practice for our amputee patients. It's been a real privilege to steer such a dynamic group. Relationships with our professional colleagues are strong. BACPAR is frequently praised for its constructive contributions, for example to amputee service reports and quality frameworks and to CSP information and documents. BACPAR makes a difference. Our profile is high. Keep up the good work!

I've worked with amputees for many happy years. I've also enjoyed supporting the development of others, be they students (within and beyond amputee rehab, physio and non physio), work colleagues, members of BACPAR and other related groups. With this in mind last autumn I took an enormous step away from clinical practice to work at the CSP as a Professional Adviser where I apply this experience to supporting the members of the CSP as a whole, albeit in a very different way. Always keen to try new things, I'm learning a lot and it's interesting, but one thing's certain, as I have always known, my professional heart lies first and foremost with all things amputee.

With very best wishes,

Mary Jane Cole, BACPAR Chair 2007 - 2010

Editorial

Well, here you have it, the all new singing and dancing journal as edited by me, well actually I think a large mention of the husband would be appropriate here, he is endlessly patient and has spent more than a few days um….well editing the journal!! He says providing technical support…no he was editing the journal!

I would like to say a big thank you to our advertisers, they all got their copy in on time and I really appreciated it! Also to the hero's of the day who got me articles as promised within the last week and the others who got me pictures and other bits and pieces which have made this whole thing possible. You know who you are THANK YOU!

This journal is sport orientated as that's what I got submitted, but at the risk of sounding like our chair…the journal is what you make it. (That's not a bad thing to sound like MJ I would like to add…if you were wondering!!) I can only publish what you give me, and you have to remember that what would seem tedious and simple to you is probably the answer to someone else's dilemma! So if you have something send it in! It can be anything from an e-mail opinion to a fully fledged article….

If you were wondering where you have heard me rattle on before "Yes it's me …the ex-moderator from iCSP…." This is a much more static job and I only get two editorials in a year, I hear you all sigh with relief!

So what did you all think of Gok Wan and his programme? Did he do good? Are the Outcome measures working for you? Should the journal be available online for us all to look at? (let's sneak this one in) We want to hear your views, we don't work in isolation …it just feels like it sometimes!!!

OK, I'm off now all articles, letters, small rants, large rants ….anything that says you have read this would be appreciated!!!

Oh and one small thing Autumn Journal Deadline is 20th August, it's my birthday so I am not going to forget it and I am not accepting anything that is late! (that is the first foothill in my learning mountain!)

Sue Flute, Editor

Danielle's award for PSW of the year

I have the privilege of working with the current CSP Physiotherapy Support Worker of the Year Danielle Freeth. Danielle and I have worked together at Wexham Park Hospital, Slough since I started my post as amputee team leader last year. Over the last 12 months I have come to realise just how outstanding Danielle is when working with amputees, her ability to develop rapport with our patient group is second to none, she frequently amazes (and on occasion frustrates me) by having an uncanny knack of getting patients to do activities that they are reluctant to do when I ask them. Somehow she manages to convince them that it *is* possible to work through the pain and that practising with the femurette or getting on/off the floor *really is* a fantastic idea in spite of my previous exasperated attempts of trying to get the patients to do the very same activities. A result of her ability to really understand our patient group is that with ease she is able to tailor treatment sessions to what is currently relevant to an individual and to advocate for them with regard to MDT planning and limb fitting.

Danielle's top notch organisational skills are also something that I use (or should that be exploit?!) to my advantage, she often remembers details about a patient's social situation which have an impact on their attendance at amputee class and in knowing that my grey cells sometimes operate slightly slower than her's, which I lamely put that down to there being a couple of years' age difference, she has normally taken the initiative and made alternative arrangements before I've even realised!

Most of all I appreciate Danielle for her valuable contribution to helping me enjoy running the amputee physiotherapy service at Wexham Park Hospital, Danielle PSWOTY 2009 – Congratulations!

Jo Wilkinson, Physiotherapist, Wexham Park Hospital, Slough

Congratulations Vanessa Davies MBE

I had wonderful day at Windsor Castle. It was an absolutely fantastic experience for myself, husband John and daughters Eve and Holly - I was so thrilled that they too could share this special and memorable day with me. We arrived in our best outfits at the Queen's entrance, proceeding up the main staircase with guards in their full regalia either side directing us to our places. My family were directed into the main Ceremonial room, whilst I together with the other award winners was taken separately to a large richly decorated reception room with huge chandeliers to await our briefing!

I felt very nervous, but soon realised that everyone else was equally in awe of meeting Her Majesty! We mingled and chatted for a while before the formalities began. We were then given instructions for correct etiquette - where to walk, where to stop, when to bow or curtsey, how to address the Queen etc

Everything, as expected, was planned and arranged with military precision - leaving nothing to chance - people being given gentle prompts if they forgot anything! My family enjoyed the proceedings immensely - noting that people were very anxious and did make mistakes, but the Queen of course merely smiled and remained very relaxed and composed. She spoke to all 60 award winners for 1-2 minutes each and was so gracious. We had a wonderful weekend, with wonderful memories to cherish.

After what I consider to be a very privileged and much enjoyed 34 yr career, I am so proud and still feel overwhelmed to receive this honour. Over the years, I have met some wonderful people and made fantastic friends - particularly since my involvement with Amputee Rehab and BACPAR. It is lovely to think that we can be recognised in such a way for doing the job that we love, and I accept this accolade on behalf of all my colleagues.

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Liz Condie Retires

Elizabeth Condie, a fellow of the Chartered Society of Physiotherapy is retiring in June 2010 from the post of Reader at the National Centre for Prosthetics and Orthotics, Strathclyde University where she has worked since 1981.

Liz qualified as a physiotherapist in 1968, a profession she chose to fulfil her dual ambitions of working in healthcare and travelling. Indeed, her first jobs took her to Norway, Switzerland and London and then later, her teaching and lecturing allowed her to travel all over the world. She returned to Glasgow in the late 70s to work on the Surgical Unit of Gartnaval General Hospital. It was in this post that she developed a lasting special interest in amputee rehabilitation which led her to the position of lecturer at the National Centre.

Throughout her career she has been tireless in promoting the role of physiotherapy. For 10 years she was an active member of the Council of the Chartered Society of Physiotherapy (CSP) and then chairman of Scottish Board of CSP. She has held many different offices including; Vice-chairman of the World Confederation of Physical Therapy, Chairman of Scottish Physiotherapists' Research Group, Convener of Glasgow Physiotherapy Research Group and Chairman and founder of Allied health Professions Forum. Liz has always campaigned to raise the profile and awareness of research amongst physiotherapists even before the term 'Evidence Based Practice' was coined. Her contribution was recognised by her peers in 1997 when she was elected Fellow of the Chartered Society of Physiotherapy principally for her research related activities.

More recently, Liz is most well known for her work with the Scottish Physiotherapy Amputee Research Group (SPARG). Liz founded SPARG in 1991 with the aim of developing a standardized, national system of information collection and analysis to evaluate and inform amputee rehabilitation practice in Scotland and to provide a forum for discussion and debate. Under her leadership (she has always called it a dictatorship!) the group has gone from strength to strength developing a pioneering web-based data base of rehabilitation outcomes for all new lower limb amputees in Scotland and writing guidelines to inform clinical practice. She has been instrumental in securing funding to support the development of the data base and numerous research projects often in collaboration with other professional groups and voluntary organisations. She has promoted energetically the work of SPARG nationally and internationally, encouraging and supporting SPARG members to do the same.

Liz is always in demand as a speaker at National and International Conferences. Her clear, succinct and articulate presentations are only to be aspired to.

"Liz is a leader not a follower. She commands respect and leads with authority. She exacts high standards but nothing that she would not expect of herself. If she disagrees with something she will speak out with courage and she is a fearless campaigner if she suspects an injustice. She is quick to feedback if a job is not up to scratch but equally quick to give praise and encouragement when it is due. She has an amazing work ethic that has led her, even at times of personal illness and sadness, to be at her desk meeting the next deadline. She is impatient with colleagues who lack her commitment and drive but endlessly patient with anyone who is willing to work hard, learn and stand up to be heard.

Liz has a formidable presence but underneath the steely exterior is a warm heart. She is a loyal, kind and unstintingly generous friend. She is an amazing hostess and cook who has been known to prepare bacon and eggs for two small boys who did not quite fancy salmon-en-croute for lunch. She is passionate about her home and a keen gardener. She is a bit of an adventurer enjoying sailing, scuba diving, horse riding and previously, camping in the wet and windy wilds of Scotland.

Liz is a gregarious person. She has boundless energy and knows how to balance her hard work with a lively social life. She is very funny and an excellent raconteur. Social occasions are never dull with her in the room.

The world of physiotherapy and amputee rehabilitation will miss a larger than life personality who inspired us all to work that bit harder, challenged us to be more questioning and encouraged us to party a little bit longer. We all wish Liz a long and happy retirement with good health, much fun as 'Granny Liz', many exotic trips and happy times with her husband David."

Helen Scott, Physiotherapist, WestMARC

"Liz's reputation as a mover and shaker in the field of amputee rehabilitation was already established when I was a junior in the Roehampton Walking School (too many years ago than I care to remember!) And ever since, Liz's influence in the field has continued to be significant with numerous publications, visionary thinking and a wonderful ability to assert authority and leadership in an eloquent and persuasive manner.

Not only has Liz raised the profile of physiotherapy in amputee rehab, but also of physiotherapy as a whole; she has contributed significantly to the development of the profession not just in the UK but internationally and I suspect she was one of the early advocates of evidence based practice.

I first met Liz later, in the 80's in my early days as a senior physio in amputee rehab, in her educator role at one of the courses delivered by the University of Strathclyde. In addition to her excellent lecturing style I won't forget one particular incident – she had a slide of a female amputee sitting in a fitting room, impeccably dressed and with smart hat head (no coat, prosthesis off)….Liz explained to the course participants, who were mostly English, that the wearing of a hat indoors was customary attire for many Scottish ladies. As a fellow Scot (Liz and I were both brought up in a similar part of Edinburgh and went to neighbouring schools) this wasn't a surprise but it made me laugh….however our English peers were simply bemused which made me laugh all the more. Like Carolyn, I've always enjoyed Liz's sense of humour.

Our paths have since crossed on several occasions, at conferences mostly and yes, frequently in the bar! More recently, in my role as BACPAR Chair, we've been in touch particularly in relation to educational activities. BACPAR has certainly gained from it's special relationship with SPARG. I only recently attended a SPARG meeting for the first time and I too now aspire to her admiral and formidable qualities as a chairperson. And imagine how I esteemed felt when I won an award at Vancouver ISPO alongside Liz!!

The amputee world is indebted to all that Liz has done – her achievements been fantastic, her presence and input will be missed enormously. I don't doubt that Liz will continue to embrace her retirement with great enthusiasm. Personally and on behalf of BACPAR I wish her a very happy, healthy and fulfilling retirement."

Mary Jane Cole, Chair BACPAR 2007 - 2010 (previously Research Officer)

"I have known of Liz Condie for 20 years. She is an institution in the field of amputee physiotherapy. From the first conference I ever attended in 1993, Mr and Mrs Condie were a force to be reckoned with, making presenting an extremely scary experience. Once I started to attend the SPARG meetings and ISPO conferences I grew to know Liz better. She speaks with authority in her field and with clarity. Her ability to articulate is enviable.

Liz commands action! She has created and developed the Scottish Physiotherapy Amputee Research Group with endless enthusiasm and heart, promoting their work until it has received the national and international recognition that it has and deserves. She is indeed leaving a legacy for those remaining SPARG members to maintain and preserve. I loved her chairman's style at meetings, formidable and effective but encouraging and empowering, some of which I tried to emulate during my time as BACPAR chair. BACPAR and SPARG have a comfortable arrangement, organisations that sit happily side by side, fulfilling different roles. BACPAR concerned with education and SPARG with collecting and disseminating research that can influence every physiotherapist's daily practice. Professionally she is a driver and a leader, supported by her loyal SPARG members and colleagues. She effects change through her inimitable presence and style.

On a more personal note, Liz is a lot of fun. She enjoys socializing and is not afraid to laugh at herself. Her enthusiasm and confidence is infectious and she can be found many a time by the bar in the early hours after a conference or meeting.
Although Liz Condie will be missed from the world of prosthetic and orthotics, SPARG will continue in the capable hands of her team. Perhaps not with the same verve and steely approach but certainly with the same tenacity, diligence for detail and dedication, that has been its success so far. BACPAR wishes Liz a long and happy retirement."

Carolyn Hale, Chair BACPAR 2005-2007

"I can't think of anything more to say after Carolyn & Mary-Jane. More than anyone else Liz has raised the profile and respect for Amputee & Prosthetic physiotherapy. Thank you, Liz. Enjoy your retirement."

Penny Broomhead, Chair BACPAR 1998- 2001

BACPAR Toolbox of Outcome Measures v1

The first version of the BACPAR Outcome Measures toolbox has now been launched, and can be found to download from the 'documents' section of iCSP.

The BACPAR Executive committee felt it was a priority to develop a national consensus of outcomes for use with our population. Gaining a consensus decision on outcome measures would allow for data comparison, benchmarking, and informing prescription to contribute to eliminating a postcode service, research and service development. Thus a working party was formed at the beginning of Summer 2009.

The working party adhered to specific criteria when selecting outcome measures to be included in the toolbox. These criteria were that the outcome measures should be portable, involve no cost, easy to use, reliable, valid with our population and responsive to change.

Six outcome measures were selected to be included in the toolbox. These are: the Activities-specific Balance Confidence Scale – UK version (ABC-UK), the Amputee Mobility Predictor (AMP), the Houghton Scale, the Locomotor Capabilities Index – 5 (LCI-5), the Trinity Amputation and Prosthesis Experiences Scales (TAPES) and the Timed Up and Go (TUG).

The toolbox contains an introduction explaining the background behind the development of the toolbox, and evidence-based guidance notes for each of the outcome measures. Most of the guidance notes also include the outcome measure tool itself. There is also an appendix listing the rejected outcome measures.

We propose to produce an Excel spreadsheet to aid recording and scoring of the outcome measures.

The working party welcomes feedback on the toolbox via your regional reps.

Katharine Atkin, Specialist Physiotherapist in Amputee Rehabilitation,Portsmouth DSC

A taste of what is on interactive CSP....

As one of the Amputee Network moderators for iCSP I just thought I'd write a few lines about what is on the site that may be of interest to anyone not already signed up to iCSP. It's easy to do this though the CSP website, you just need your CSP membership number. Any contributions you make can be printed off and saved for your CPD folder. For more information please check: http://www.interactivecsp.org.uk/

In the documents section:

- Consultation from the CSP on CIOG's
- BACPAR membership forms for 2010
- Guide for Wii Fit- CPD information
- Care Pathways
- Amputee assessment forms

Latest discussions include:

- PPAM aids for larger patients
- A joint study event with ISPO UK - do BACPAR want this?
- Traumatic amputee hopping
- Hoisting amputee patients

News topics:

- New NICE Guidelines on venous thromboembolism
- Medical Care for veterans
- Vanessa Davies has been awarded an MBE in the New Years Honours

Courses:

- Regional BACPAR courses are listed
- BACPAR conferences

This list is not exhaustive a big thank you to all who contribute and welcome please to any new contributors

Paula O'Neill, Amputee Network Moderator for iCSP

Progress Update on Guidelines

Update of 2003 Guidelines for the Physiotherapy Management of Adults with Lower Limb Prostheses

New evidence has been identified and appraised ready for inclusion in the new guideline. We are currently in discussions with SKIPP (Supporting Knowledge in Physiotherapy Practice – run by the CSP) to ensure we follow sound methodology and incorporate CSP recommendations. Once this process has been finalised the changes can be included and the guideline updated.

Whilst we are reviewing the guideline we would appreciate some feedback on how people have found the audit tool included within the guideline. Please email us with comments on ease of use, relevance and any practical changes you would like to see.

Contra-lateral Foot Guidelines

This was developed as part of the 2007 cohort for the Bradford PG certificate amputee course. We are currently seeking further clarification and recommendations from Bradford University on how to improve the guideline before publication. We will also be seeking advice from other stakeholders (podiatrists, Diabetic consultants etc) to ensure the finished guideline is as robust as possible.

Paediatrics

There is an initial concept for the project with the working title of: 'A guide to best practice for a holistic approach to the management of children with limb loss'.

The LLPOT/ULPOT are contacting all stakeholders to set up a working party to try and take this project forward.

Any questions or queries please contact us. Thank you,

Karen Clark: karen.clark4@nhs.net, Tim Randell: tim.randell@rbch.nhs.uk

BACPAR West Midlands Regional Report

The West Midlands group currently has 21 members. The last meeting was held on 7th October 2009 at the West Midlands Regional Limb Centre, Selly Oak. Hilary Smith gave feedback from the BACPAR Executive meeting held in September 2009, and Melissa Berry reported back on her progress following discussions with LLOP/ULPOT towards developing guidelines for paediatric patients. We also had a demonstration and practise session with the Nintendo Wii and discussed how to record treatment sessions and outcomes.

Our next meeting is planned for 15th April 2010, and we will be looking at auditing our practise with reference to the Falls guidelines, and will discuss our experience with outcome measures, chiefly TUAG and SIGAM. We will also start to plan our next basic Amputee Study Day.

Hilary Smith, BACPAR Regional Rep - West Midlands

Use of the Gymnastic Ball in Amputee Rehabilitation

Oxford Centre for Enablement
Nuffield Orthopaedic Centre NHS Trust

28th April 2010

1.00pm – 7.00pm

Venue: OCE First Floor Physio Gym

Guest Course Lecturer - Janice Champion
Specialist Clinician in Neurophysiotherapy
at Medway Maritime Hospital

Cost: BACPAR Members £45
Non BACPAR Members £60

For further info contact: Yolandi Muller – Course Co-ordinator
Tel: 01865 737305 Email: yolandi.muller@noc.nhs.uk

HPC standards for CPD

Registrants must:

1. Maintain a continuous, up-to-date and accurate record for their CPD activities.
2. Demonstrate that their CPD activities are a mixture of learning activities relevant to current or future practice.
3. Seek to ensure that their CPD has contributed to the quality of their practice and service delivery.
4. Seek to ensure that their CPD benefits the service user.
5. Upon request, present a written profile (which must be their own work and supported by evidence) explaining how they have met the standards for CPD.

HPC & CPD – 10 things you need to do:

1. Try & record your CPD little & often. The shoe box method (put it somewhere safe and deal with it later) takes much longer in the end and is very stressful if you are audited by HPC.
2. You can record your evidence in any way that suits you; a paper folder, on your computer, on CSP ePortfolio (Pebblepad) or in a shoe box but it must be easily retrievable when you need it.
3. Keep a detailed index or log; with a brief description of the event, date, type of learning experience, whether it fulfils HPC standard 3 or 4 (the last 2 can be ticks in a column). If you submit a detailed index of your CPD folder as a piece of evidence you have already fulfilled standards 1 & 2.
4. Your evidence must show planning, it has to be recent (within 2 years) but relevant to current or future practice. If you have had a performance review and/or have a personal development plan refer to them.
5. Your evidence must be a mixture of learning experiences; courses alone are not enough to fulfil standard 2. 'Continuing professional development and your registration', published by the HPC & downloadable from their website has examples of CPD activities and evidence.
6. Learn to recognise CPD opportunities & be on the lookout for them. The HPC audit will be repeated every 2 years when we re-register so it is here to stay. Just because you have been selected once does not mean you will not be selected next time.
7. Cherry pick your evidence, select examples that you can use to show you have learnt in a variety of ways eg a course (formal learning) followed by cascading to other staff (professional activity) & put into practice & then audited (work based learning), which develops your clinical skills (standard 3) and develops the service (standard 4). The HPC CPD profile has a limited word count so don't use several pieces of evidence when one will do.
8. CPD is meaningless without reflection, however brief your thoughts on what you have learnt and how you can apply it they are essential to each piece of evidence you submit.
9. Use the resources available, the HPC has an extensive website with all the information you need; www.hpc-uk.org, and the CSP's resources and advice (will provide advice in the next few months) and don't forget your colleagues; Prosthetists, Orthotists & Occupational Therapists have already been audited.
10. If you are audited don't forget to re-register and pay your registration fee.

Penny Broomhead, CPD Co-ordinator, BACPAR

BACPAR Bursaries

Bursary money will be available at the next executive BACPAR meeting in Autumn 2010. Bursaries are available to support BACPAR members. Awards may be granted towards presenting a paper at a conference, attending relevant courses and conferences, or to help with a project related to amputee or prosthetic rehabilitation.

The bursary guidelines and application form are downloadable from iCSP, or available from your regional rep.

Quality Improvement Framework for Major Amputation surgery

On February 3rd 2010 the Vascular Society of Great Britain and Ireland (VSGBI) held a meeting to develop a Quality Improvement Framework for Major Amputation surgery, with the aim to reduce the peri-operative mortality after major amputation to less than 5%.

The current peri-operative mortality rate (up to 30 days post-op) is between 10% and 20%, depending on regional variation. If this could be reduced to 5% it could potentially prevent up to 750 deaths per year.

The VSBGI had invited stakeholders including the Vascular Anaesthetic Society, the British Society of Rehabilitation Medicine, the Society of Vascular Nurses and BACPAR and attendees included consultant and specialist registrar vascular surgeons and anaesthetists, consultants in rehabilitation medicine, clinical nurse specialists , a consultant in Diabetology and Endocrinology and specialist physiotherapists.

The President of VSGBI chaired the meeting which began with a presentation on global and UK mortality rates. They range from 10% in USA & Australia to 30% in Finland. The overall rate in UK is 19%, ranging from 19% in the North West to only 14% in the South West. The mortality rate for minor amputation (digits to transmetatarsal) is surprisingly high at 3.6%. Trans-femoral mortality in the UK varies between 24%-20% and trans-tibial between 14% -10%, depending on geography.

The next presentation looked at modifiable factors & how to influence them. The most statistically significant being white cell count and hypertension pre-operatively. Although there appeared to be no difference in grade of surgeon or anaesthetist carrying out the procedure the final presentation identified a marked difference in mortality rates between operations carried out during normal working hours (10%) and out of hours (25%); the patient was 3 times more likely to die if the procedure was performed out of hours. Changing practice to reduce out of hours amputations since 2005 has showed a corresponding reduction in mortality rates.

The meeting was then split into 3 groups; pre-operative, peri-operative and post-operative, with the aim of producing 3 sections of a draft framework to improve the practice and the outcome of major amputation surgery. Some of the key points in the draft included;

- Assessment and management by a multidisciplinary specialist vascular team
- Formal protocols for pain management, wound care and care of the contralateral limb
- Early discharge planning
- The operation to be carried out within normal working hours , non-elective procedures within 48 hours of the decision & no patient to have the operation deferred more than once
- Antibiotic prophylaxis
- Early access to local amputee rehab teams
- Formal referral to specialist amputee rehab teams

In the space of one day having been presented with these and other interesting statistics this group of interested & expert individuals came up with a draft document similar to the Framework for improving the results of elective abdominal aortic aneurysm repair, published in 2009 & available at www.vascularsociety.org.uk . The draft will go out for consultation to the membership of VSGBI & aims to be published at their AGM in November.

The speed with which this happened was due to the expertise in the room and the positive attitude & willingness to improve the situation. The need for multidisciplinary involvement was stressed repeatedly, the vascular surgeons wanted input from other specialties, in particular physiotherapy.

As the business of the day concluded a conversation developed around how to engage surgical trainees and make them realise the significance and implications of major amputation. The rehab consultants agreed to draw up 10 top tips on what makes a good residual limb, with photos to illustrate good and bad examples and the surgeons were all encouraged and invited to visit their referring prosthetic centres to see the results of their first step in the rehabilitation of the vascular patient requiring amputation.

This last message was presented and emphasised by BACPAR the previous week to 20 trainee surgeons at the Royal College of Surgeons participating in the Amputations Symposium, a 2 day course which aims to improve the standard of amputation surgery, now in its third year.

Penny Broomhead, Education Officer, BACPAR

November 2009 BACPAR Conference Review

Following last year's successful 2 day conference it was decided that the same format should be followed and this year BACPAR members travelled to Shrigley Hall Hotel near Macclesfield for 2 very informative days and the BACPAR AGM.

The first morning was dedicated to Outcome Measures (OM), a subject that was touched upon briefly last year by Helen Scott. Jane Cummings, Consultant Physiotherapist at Cleveland DSC, started the morning with an overview of the purpose of OM's and what they should be – valid for purpose, sensitive and reliable. Natalie Vanicek, Lecturer in Biomechanics at University of Hull, then spoke about a research study she had undertaken (see BACPAR Journal No 29) studying how physiotherapists are using OM's in outpatient amputee rehabilitation in England. Amongst her conclusions was the fact that 79% of us are using OM's but at the moment there is no consensus to which ones we use.

Helen Scott, Clinical Specialist Physiotherapist at Westmarc, Glasgow, was back again this year and expanded on her talk from last year giving an excellent presentation detailing how Scotland has implemented OM's. For mobility they use the Locomotor Capabilities Index 5 (LCI-5), Timed Up and Go (TUG) and Timed Walking Test (TWT). For follow up and function the Functional Measure for Amputees (FMA) is used and for quality of life the Patient Generated Index (PGI) is used. Two new developments that Helen talked about were the L Test and the LCI 10-4. The L test has been developed from the TUG and involves a 10 meter walk test in the shape of the letter L with 2 180° turns and sit to stand. The LCI 10-4 has been developed from the LCI-5. It has had 4 items removed; walk outside in inclement weather, get up off the floor, step down kerb and step up kerb. The rating scale has also changed from a 5 point scale to a 4 point scale; 0=unable, 1 = if someone helps or is near, 2 = alone with walking aids and 3 = alone without walking aids. Unfortunately at the moment the LCI 10-4 is showing ceiling effects so needs further review before it is put into practice.

Tom Collins, Pre-registration Clinical Scientist, was next up and told us how the Rehabilitation Centre at Queen Mary's Hospital has implemented the TUG and TWT. In addition to the talk Tom also presented a poster on the subject for which he won the Louise White Poster Award. Su Ryan, Clinical Team Leader, also from Queen Mary's Hospital, ended the morning session giving an overview of why OM's are more important than ever now. Commissioners want us to be able to demonstrate that we are providing quality, clinical effectiveness and improvements for patients. OM's help us do this.

BACPAR now has a OM's working party and the aim of this group is to produce a draft basket of OM's that BACPAR members can pilot with lower limb prosthetic patients. The results of this will be presented at the next BACPAR conference so watch this space!

In the afternoon following the AGM we had 2 practical orientated sessions. Lynn Hirst, Senior Prosthetics Physiotherapist in Leeds and Carolyn Hirons, Specialist Physiotherapist at PACE Rehabilitation, demonstrated the use of WiiFit in amputee rehabilitation. Each delegate was given a very useful WiiFit for Lower Limb Prosthetic Users booklet which is available through Ossur. Louise Tisdale concluded the afternoon group with a taster session on assessment and management of uncontrolled movement (Kinetic Control) in the management of transfemoral gait deviations.

On Day 2 we were split into 2 groups. Luckily I was in group B and spent a fascinating morning learning about Graded Motor Imagery. I say luckily as my brain was fresh from a night's sleep which it needed to be! The session was run by Ben Davies and Tim Beames of the Neuro Orthopaedic Institute. Graded Motor Imagery is an emerging new rehabilitation strategy for chronic pain states. It comprises a sequence of strategies including laterality restoration, motor imagery and mirror therapy. By the end of this session my little grey cells were fizzing but the session was broken up with practical moments where the audience were asked to move their arms in all sorts of

weird directions. Ben and Tim won the Louise White Award for best presentation almost unanimously.
The final session after lunch for group B was titled Prosthetics Update – Your Questions Answered. BACPAR members had been invited to pose questions to the prosthetic companies and each company had approximately 15 minutes to give their responses. It was interesting to see how the different companies approached this and the answers they gave.

All in all it was a very informative and enjoyable 2 days. The only negatives for me were the weather (its hard work trying to register people when the wind keeps blowing all the paper everywhere and I don't like driving in the dark and rain!) and deciding to stay in the Travelodge instead of staying in the venue hotel. Although the cost was vastly different I did miss out on the networking aspect which, in hindsight, is as important as the actual lectures (not to mention the pool, Jacuzzi, full English breakfast…) I would urge anyone going this year to bite the bullet and pay the extra.

Finally many thanks to Louise Tisdale, Marc Hudson and Mary Jane Cole for all their hard work organising another excellent BACPAR conference.

Lucy Holt, MCSP, Oxford Prosthetics Centre

A Prosthetist's Experience

I decided to attend this year's BACPAR conference as the main subject on the first day was outcome measures. Having recently attended a Department of Health conference on the same subject as part of my work for RSL Steepers, I recognised that this is a very important area that we all need to get up to speed on. I have also chosen this as a possible subject for my MSc thesis, so hoped the conference would be a good opportunity for "networking "and catching up on recent developments. First impressions were excellent – the hotel booking was easy and cheap and the hotel itself very impressive – apparently the views were great, if only it had stopped raining! The program was very comprehensive – a good introduction to the subject and the work Bacpar is doing followed by interesting talks from experts in the field. The discussions after each session were impressive – well organized for such a large group of people with a good range of opinions and knowledge, I was glad to be able to stand up and give the prosthetist viewpoint and reinforce that development of outcome tools should be a group effort. The debates continued into the breaks and provided good opportunities to swap ideas with likeminded people. The work that Bacpar is doing to develop a "basket" of outcome measurement tools is very useful and I hope to encourage collaboration with BAPO as they start similar developments.
All in all a well organised and run conference, with interesting talks and stimulating debates. Thanks to the organisers and I hope to attend the whole event next year.

Vicky Robinson, Senior Prosthetist, Best Practice Group Lead, RSL Steeper, Leeds

Amputee Literature from SPARG

Annual Reports of Amputee Activity £15. Excellent for service planning and standard setting

Intermittent Claudication Guidelines £10. Endorsed by SIGN

Vessa PPAM Aid Guidelines £15. Endorsement by the CSP

'The Knee Guide' £15. A comprehensive guide to prosthetic knees and implications for gait training.

Cheques should be sent to Helen Scott, Physiotherapy Department, WESTMARC, Southern General Hospital, Govan, Glasgow.

Also available through Sally Thomson. Call 0141 211 4778/5429
or email Sally.thomson@northglasgow.scot.nhs.uk with requests. Cheques payable to 'SPARG'.

Advantages of Implementing an Innovative and Seamless Amputee Service at the Royal Free Hospital

Royal Free Hampstead NHS NHS Trust

Royal Free Hampstead NHS NHS Trust

Kate Primett (Band 7 Physiotherapist, Amputee Rehabilitation) **Nicholas Evans** (Clinical Nurse Specialist, Vascular Surgery)

Abstract

Aims:
To demonstrate, in terms of length of stay (LOS) and cost benefit, the advantages of an integrated, multi-disciplinary amputee service at the Royal Free Hospital.

Background:
Audit in 2005 showed a mean length of stay of 126 days. Contributing factors included insufficient therapy hours with delays in patient mobilisation, inconsistent MDT communication, lack of streamlined patient pathways and discharge co-ordination, limited equipment resources and inadequate psychological support. This did not conform with 2006 BACPAR guidelines for pre and post operative Amputee management. Significant improvements were made to the service and the second cycle of audit took place in 2008.

Methods:
Data was collected using specially designed audit sheets. Information gathered included patient demographics, amputation level, LOS, referrals, co-morbidities, reasons for delays, MDT involvement and discharge planning. Complete data on all 20 lower limb trauma and vascular amputee inpatients from January to December 2008 was acquired. Mean LOS was compared against 2005 statistics. These findings were used to analyse the financial benefits to the Trust and potential income generated by saved bed days.

Results:
Post-operatively, LOS was reduced by 63% (Mean LOS falling from 126 to 46 days). Total bed days were reduced by 1,600 (from 2,520 to 920). This created a £350,590 saving to the Trust. Potential income generated by saved bed days was calculated at £284,356 for elective and £132,484 for non-elective patients.

Conclusion:
Innovative service developments have substantially reduced LOS. The Royal Free has benefited from significant financial gains. A co-ordinated seamless approach and increased therapy input has resulted in higher standards of patient care and earlier social re-integration.

Amputee Service in 2005

Average length of stay was…….126 days

Why?

- Limited therapy hours (Physiotherapy 0.5 Band 5 and 8, WTE Band 6 OT)
- Delayed mobilisation
- Limited MDT communication
- Discharge / referral delays
- Lack of basic equipment
- Limited psychological support

Service Development Changes in 2008

Increased Therapy input

- Physiotherapy; WTE Band 7, 0.5 Band 5 Amputee/ Vascular
- Occupational Therapy; 0.5 Band 7, WTE Band 6 Amputee Rehabilitation
- WTE Generic Amputee Assistant

MDT Communication

- MDT Service Provision Audit
- Monthly MDT Steering group meetings
- Weekly MDT patient caseload meetings
- Weekly Amputee Carer Support Group

Re-organisation of Therapy Training Programme

- Monthly Senior MDT External teaching programme
- Weekly MDT Internal teaching programme
- Band 5 and 3 staff competency booklets

Improved Communication with Service Users

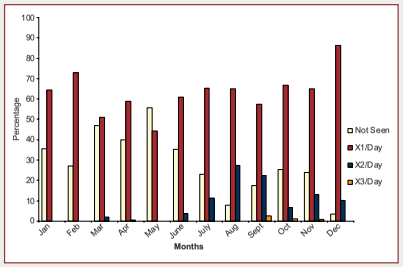
- Joint therapy patient timetable/Outcome measure/ GOALS sheets
- Regular MDT patient case conferences

Equipment

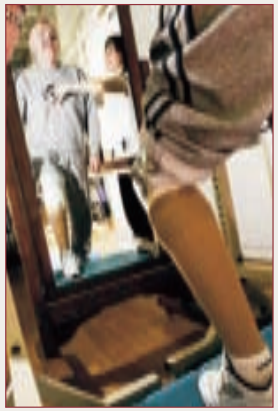
- Purchase of 6 Amputee specific loan wheelchairs
- Access to extra gym facilities

Service Development changes implemented in 2008 reduced average post op length of stay by 63%

Average Number of Amputee Physiotherapy contacts per month



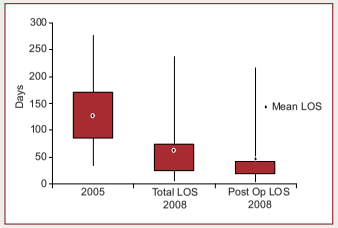
Physiotherapy Rehabilitation



Audit Results - LOS figures

Patient	Post op LOS 2005	LOS 2008	Post op LOS 2008
1	278	237	217
2	202	224	170
3	196	111	94
4	188	76	42
5	174	75	30
6	169	74	34
7	151	71	56
8	134	54	38
9	131	51	41
10	125	45	43
11	115	33	17
12	109 (60%)	30	25
13	97	28	13
14	91	26	25
15	85	24	16
16	81	23	19
17	75	21	14
18	45	20	19
19	41	6	6
20	34	6	3
Mean	**126**	**61**	**46**
Median	125	45	43
Mode	100-200	10-30	10-30

Box Plots Length of Stay Amputee Patients



Service Development Costs

Annual Costs	
Physio band 7	£34,909.20
Therapy Assistant, Band 3	£17,800.80
Total	**£52,710.00**
One-Off Costs	
6 Wheelchairs	£1947.50
Therapy Assistant, Band 3	£854.87
Total	**£2802.37**
Total Sevice Development Costs	**£55,512.37**

Financial Benefits for the Trust

	2005	2008	Saving
Mean LOS	126	46	80
Number of Patients	20	20	
Total Bed Days	2,520	920	1,600
Ward Costs (9W)	**£552,179**	**£201,589**	**£350,590**

Potential Income Generated by Saved Bed Days

	Elective	Non-Elective
Vascular Average LOS (as per J. Plunkett 07/08)	7	25
Spells	210	64
AverageTariff Vascular Surgery	£1,352	£2,070
Income	**£284,356**	**£132,484**

Service Development Strategies Implemented in 2009

- Band 5 post became full-time Vascular/ Amputee
- Hosted Regional BACPAR spring study day (March 09)
- Review and development of Service provision audit
- Implementation MDT patient information Booklet
- Implementation of weekly Carer Support Group
- Advertising the new Amputee Service – National and Local Publications, National Conferences, Internet, Intranet, Advertising leaflets to GP's, hospital posters.

Service Development Strategies for the future

- Service Development presentation at National Nursing conference
- Patient Satisfaction Questionnaire
- Successful implementation of Therapy Documentation
- Improved communication links with podiatry
- Successful implement of weekly inpatient group
- Review of carer support group to increase attendance rates
- Audit data analysis between 2008 and 2009 statistics

Acupuncture For a Patient with Phantom Limb Pain - a Case Study

Introduction

The following case study was completed as part of a portfolio of case studies required to complete my Foundation Acupuncture Course at Coventry University. The purpose of this assignment is to undertake a detailed examination of the use of acupuncture to treat a patient with phantom limb pain (PLP). Details of the patient, examination findings, treatment plan, actual treatment, and outcomes will be presented. This is followed by a section discussing various aspects of the specific case in more detail, and also the possible wider issues and implications for acupuncture and PLP.

Patient Details

The patient chosen for this case study is a 73 year old gentleman who had a Right Transtibial Amputation in April 2008. He had initially presented on the vascular ward with an infected right 4th toe. During his admission he also had a post-operative Non- ST elevation Myocardial Infarction. His other relevant medical history is Diabetes Mellitus (Type Two) and Peripheral Vascular Disease (PVD). His diabetes is currently well controlled, although he did recently have his second left toe amputated. He lives with his wife in a bungalow, walks independently with a stick and his main hobby is to go caravanning.

He currently takes the following medications: Aspirin, Ramipril, Tramadol, Clopidogrel, Omeprazole, Insulin Novomix, and Bendroflumethiazide. His presenting complaint is phantom limb pain (PLP).He had no previous investigations but had taken Pregabalin for PLP during his initial (hospital stay) post amputation stage, but this had been discontinued by his GP.

On examination his right residual limb was completely healed. There were no pain trigger points on the residual limb.His left foot was bandaged following the amputation of an infected second toe on 16/2/09 and he was attending podiatry for regular dressing changes. The podiatrist was happy with the progress being made (verbal communication).

His main complaint was that his PLP was worse in the evenings after the removal of his prosthesis. He experienced two areas of PLP: P1 on the front of his amputated 4th and 5th toes, which was a sharp pain measuring 6 on the visual analogue scale (VAS); and P2 which was located on the posterior aspect of his amputated lower leg; which was a dull, annoying pain of longer duration with a VAS score of 5. The locations of his PLP appeared to be on the Gall Bladder Meridian for P1 (GB 43 and GB 44) and Bladder Meridian (BL 57 and BL 58) for P2. (Points as described in LianYL et al 1999).

Treatment Plan

The treatment plan was to try acupuncture for PLP as there have already been a few case reports supporting the use of acupuncture for patients with PLP (Gervitz.C, 2005). However, there is not a consensus amongst practitioners as to which approach to use regarding acupoints.
For example, Campbell.A (2001) advocates needling the stump of the amputated limb but Bradbrook.D (2004) advocates needling points in the opposite limb.
An extensive search of the literature (see references) produced 6 papers on the subject of acupuncture and PLP. Three of these papers used points on the remaining (intact) limb (Liaw.MY 1996, Monga.TN & Jaksic.T,1981,and Bradbrook.D, 2004) while Liaw.MY (1996) used global pain points in the foot of a patient with an upper limb amputation.

One study used points around the scar (Johnson et al,1996), while another study used a technique of scalp acupuncture. (However, this study was not described in sufficient detail to be reproduced (Hao.JJ & Hao.LL, 2006).

Using the opposite intact limb to treat PLP has been recommended by authors such as Hopwood (2004) and the Chartered Society of Physiotherapy Interactive website (O'Neill.P et al, 2008-2009).

After reviewing the subsequent literature the following treatment approach was undertaken: First, needling the opposite limb was not considered due to the patient having an open wound on his foot and swelling of his left lower limb which contra-indicates acupuncture over those areas (AACP, 2007). Also, auricular acupuncture was not chosen due to concerns over susceptibility to infection with auricular acupuncture (Filshie.J & White.A. 1998). The potential risk of infection may have been increased further due to this patient having diabetes. Therefore, the approach taken with this patient was to use more global pain points. (All points for this case study were located and performed as described in Hecker.HU et al, 2008).
The treatment used in this patient was to start with bilateral LI 4 (Hegu) as it "is the most important analgetic Point which affects the entire body" (Hecker.HU et al, 2008). Caution was taken with this patient as he may have had a tendency to bleed with the removal of needles due to his medication (Aspirin and Clopidogrel). Also, care was taken due to his diabetes as acupuncture can affect blood sugar levels (AACP, 2007).

The actual treatment schedule started with 10 minutes of treatment time. This was then followed two days later by a 20 minute treatment session (verbal advice on AACP foundation course by tutor V. Hopwood), and then increased to 30 minute sessions once per week. Points

would then be introduced depending on the outcome and response of the patient. The outcome measures chosen to evaluate the effects of acupuncture for this patient were as follows: VAS, MYMOP2, and the Patient Narrative (Loeser.JD et al, 2001). More objective measures were not deemed appropriate as this patient's PLP did not affect his function. The patient's MYMOP Symptom 1 was 'PLP', Symptom 2 was 'sleeping', Activity was 'relaxing in the Evening' and Wellbeing was also included from MYMOP2. His initial MYMOP score was 3.5.

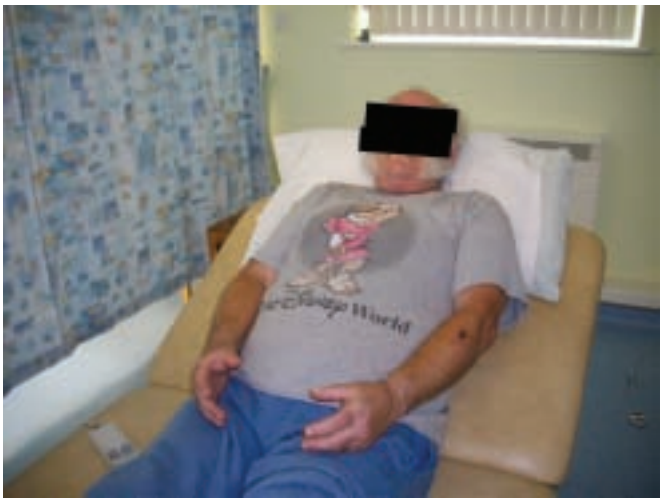
Treatment and Outcome

Written consent to acupuncture treatment was gained from the patient on initial contact, followed by verbal consent on subsequent treatments (AACP, 2007, White et al, 2001). Session 1 applied the points bilateral LI 4 (Hegu) for a period of 10 minutes. The patient felt no Deqi (the needling sensation of acupuncture) and had no adverse effects. Therefore this patient is probably not a strong responder. There was no change in his PLP following the first session.

Session 2 used the same points as the first session but for 20 minutes. He felt no Deqi but there were small spots of blood at the needle sites on removal. Pressure was applied to acupoints using clean cotton wool until the bleeding stopped (this took approximately 30 seconds).
On returning for the next session (session 3), which was 12 days later due to scheduling of appointments, the patient reported that he had experienced a small bruise at the insertion point of LI4 on his right hand after session 2. He was unconcerned about this as he had been "warned that this might happen" and said that it went away within a few days. An Adverse Incident Form was not completed for this patient as the bruise had completely disappeared and the patient had not suffered any distress. Had there been cause for concern the hospital Trust Policy on reporting incidents would have been followed.

Following further reading and a discussion with AACP foundation tutor (verbal discussion with V. Hopwood, 15/3/09), additional points were used for session 3. As well as bilateral LI4 (Hegu) points, bilateral LU7 (Lique) and Yintang were also used (see photograph 1).The treatment time was not increased as additional points were used during this session. After the removal of each needle pressure was applied to the needle sites for approximately 1 minute using clean cotton wool as a precaution following the bruise reported after session 2. (None of the remaining sessions resulted in any further bruising being either observed or reported by the patient.)
The extra points (bilateral LU7 and Yintang) were introduced to session 3 because they are noted to have the following effects: LU7 "is the Luopoint of the lung channel, and therefore the starting point for the Luo vessel. The Luo vessel connects LU7 Lieque with the coupled large intestine channel." (Stux.G et al, 2003).Traditional application states that LU7 has " a strong dispersing function for stagnation of qi" (Stux.G et al, 2003). Yintang is said to "expel wind and alleviate pain" (Lian.YL et al, 1999) and also to "calm the mind" (Hecker.HU et al, 2007).

Following session 3, immediately after the treatment, the patient said that he felt "really nice and relaxed". The patient also said that he felt "Brilliant" and stated that he was so relaxed that he would probably ask his wife to drive him home. His MYMOP score was 1 and both P1 and P2 were a VAS score of 2.



Session 4 utilised the same points as session 3 but an additional 10 minutes were added to the treatment.
At the start of session 5, possibly as a result of feeling "really good" after his last treatment, the patient stated that he had decided to stop taking all of his analgesia the day before. However, he had then suffered a lot of pain in his left foot at the site of his amputated 2nd toe. Following this incident he restarted his regular analgesia and was advised to gradually reduce the dosage.

Session 5 repeated the same points as sessions 3 and 4 for a period of 30 minutes. The patient stated, immediately post treatment, that he felt "nice and relaxed".

His next session was 3 weeks later when he reported no further incidences of PLP (VAS for P1 and P2 were 0). His MYMOP score was 0.5 (wellbeing scoring 2, activity and symptoms 1 and 2 both scoring 0) and he was successfully weaning himself off his analgesia. No further acupuncture treatment was deemed necessary at session 6.

The patient continues to attend the amputee group as an out-patient and, to date, he has not had a recurrence of his PLP. The patient stated that he is pleased with the result of acupuncture having had chronic PLP for almost 1 year.

Discussion

Within this discussion the following three areas will be considered:

- Defining objective correlations between treatment and outcome

- Issues pertaining to acupuncture, PLP and the patient in the case study
- Acupuncture/PLP: evidence based practice and the NHS

From this case study we are able to observe a successful outcome for the use of acupuncture in a patient with chronic PLP. However, an important issue that has to be taken into consideration is as follows: How do we objectively verify that the treatment that we have used (acupuncture) correlates to the outcome (reduction of PLP)? One such process that adds a greater degree of objective rigor is the incorporation of objective measurement tools. Therefore, what follows is an analysis of the outcome measurement tools used in this case study. The use of VAS is widely accepted in the measurement of pain. (Lund.I & Lundeberg.T, 2006). However, as VAS is a uni-dimensional measurement tool and, pain is multi-dimensional phenomena, the use of VAS as a sole measurement framework could be deemed as insufficient. Therefore, in this case study the additional use of a quality of life (QOL) questionnaire was also included in the assessment process (this is because a QOL questionnaire is able to measure multi-dimensional aspects of pain). Initially, in order to measure QOL the use of the SF 36 was considered as it had already been used in investigations into PLP and QOL(Van der Schans et al, 2002). However, a recent trial of acupuncture in diabetic patients found that it was too long and complicated for most patients to complete (Ahn.AC et al 2007). Therefore, it was not considered for this patient. Instead, MYMOP was used because it has shown good validity when compared with the SF-36. (Paterson.C, 1996).
Finally, it is important to consider the following issue during clinical practice: Although the use of objective measurement tools are essential so as to demonstrate treatment/outcome validity, the actual phenomena of pain, as experienced by a patient, is subjective. Therefore, all measurement tools are reliant upon the interpretation of the patient. Hence, a pain measurement tool can be susceptible to subjectivity. "No objective measures of pain exist. The sensation of pain is completely subjective" (McCaffery & Pasero, 1999).

This next section will discuss specific issues pertaining to acupuncture, PLP and the patient in the case study.
The most commonly reported method of treating PLP with acupuncture was not possible in this patient. This is because this treatment works by needling the areas of PLP in the opposite limb. However, as the patient suffers from PVD and therefore has poor circulation, there is a risk that acupuncture in the intact foot may lead to infection. Also, this approach would not be possible in bilateral amputees or other vascular amputees with poor circulation in the remaining foot. (A high percentage of lower amputations are due to Dysvascularity and therefore there is a risk of infection (67% Dysvascularity according to NASDAB, 2005/06).

An additional issue that had to be considered regarding this patient was the fact that he was diabetic. Acupuncture can effect blood sugar levels and therefore, it is important to ensure that your patient has recently eaten otherwise the treatment could induce hypoglycaemia. (AACP, 2007) Throughout this case study the physiotherapy department always had a tube of 'Hypostop gel' or 'Glucogel' (British National Formulary, 2008) available should the patient show signs of hypoglycaemia.

This case also highlighted the issue that PVD patients may also be on medication to reduce their risk of thrombo-embolism, which in turn, makes them more susceptible to bleeding. Needling directly into joints should be avoided, and additional pressure with clean cotton wool after removal of each needle is advised if there are any concerns about bleeding (AACP, 2007).

The final issue that should be considered is that of the NHS requiring evidence based practice for the treatment of patients. Even though, in the case study, there appears to be a correlation between treatment and outcome, there is insufficient research evidence within scientific literature concerning acupuncture and PLP. Therefore, it may be problematic for the NHS to accept acupuncture as a treatment of PLP because it may not be considered evidence based practice.

A recent report by the University of Birmingham which examined evidence for the use of acupuncture concluded that:

"The current evidence base is insufficient to determine whether acupuncture is effective or not."
Roberts J,& Moore D.(2006)

On initially searching for studies on acupuncture and PLP in January 2009, there was, published on the internet, a proposal for a double blind randomised trial of acupuncture for PLP which was recruiting for subjects (Samuels.N, 2008). However this webpage has recently been updated to say that the trial is currently suspended due to a lack of subjects. Thus, there needs to be more work done to continue to push for research into this fascinating area of acupuncture.

Conclusion

To conclude, this case study has highlighted several key issues which are as follows: There is a possible correlation between the use of acupuncture for the successful treatment of PLP, there is a need to be flexible in the approach to using acupuncture for PLP; practitioners should be prepared for adverse events in this group of patients; and, further research into the effectiveness of acupuncture to treat PLP is needed.

Acknowledgements

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Hospital NHS Trust, for supporting my acupuncture training.

Paula O'Neill, Physiotherapist, NHS Greater Glasgow & Clyde

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How is the CSP Contributing to the Public Health Agenda?

Move For Health (MFH)

A long-term CSP initiative aiming to raise the profile of the contribution physiotherapy makes to the prevention of disease and the promotion of good health, particularly through physical activity.

If you are interested in becoming a Champion:
- read the "Champions brief" at the Move for Health iCSP network
- visit the CSP website www.csp.org.uk/moveforhealth.
- email your details to moveforhealth@csp.org.uk.

The MFH initiative is integrated within the CSP with two strands:
- A member-focused project http://www.csp.org.uk/director/members/practice/practiceinitiatives/movehealth.cfm
- A public-facing campaign http://www.csp.org.uk/director/public/moveforhealth.cfm

Member engagement is really encouraging as the initiative builds and the profile of physiotherapy within public health grows. The project is built on the contribution of 11 member focus groups held in 2008 across the UK. It is supported by the CSP MFH project team and the iCSP MFH open network, with over 1,700 subscribers sharing knowledge and views.

Change4Life

A major Government campaign aiming to help halt the growing obesity crisis and prevent health problems associated with poor diet and an inactive lifestyle. Through MFH, the CSP is an official campaign partner.

Online Public Health Resource

The CSP has contributed to the development of a Department of Health commissioned online resource, freely accessible to all, designed to introduce clinical health professionals to public health. This module, split into 4 stand-alone units: Child Health, Stroke, Coronary Heart Disease and Diabetes, is appropriate for both qualifying physiotherapy programmes and workplace CPD, and the units provide a foundation on which to build public health skills and knowledge.

Access this resource at: www.healthknowledge.org.uk/

Physiotherapy and the Register for Exercise Professionals (REPs)

The independent public Register that recognises the qualifications and expertise of health enhancing exercise instructors in the UK is called REPs (owned by SkillsActive) The CSP has produced a statement to clearly identify how physiotherapists can be recognised on REPs and a supporting paper outlining CSP's relationship with REPs and SkillsActive.

Working with the Fitness Industry

Exercise for health is well-evidenced and is currently enjoying a high profile and strong backing politically. In UK healthcare, both the NHS and private sectors are looking towards professions with expertise in physical activity to take the lead in supporting patients to maintain their activity levels to prevent disease, to recover from it, and to maximise heath. A joint working party co-chaired by the Chief Medical Officer of the Fitness Industry Association, John Searle, and the CSP's MFH project lead, Bridget Hurley, will meet over the next 12 months to explore ways to support physiotherapists and exercise instructors to collaborate effectively to manage and refer patients.

Festival effect and physical activity legacies of the Games

Festival effect and physical activity legacies of the Games The UK is hosting five major, multi-sport games in the next four years, with the highest profile being the 2012 London Olympic and Paralympic Games. This has created a unique opportunity to promote physiotherapy, and the profession. Some members may aspire to volunteer to work at the Games and the festival effect and the legacy of the Games offer all members the potential to advocate the contribution of physiotherapy to the public health agenda within their own service, interest group or local community.

In 2008, the Department of Health commissioned a worldwide systematic review of research evidence and analysis of the potential impact of the Games on physical activity, sports participation and health to inform the Government's 2012 Legacy Action Plan which sets out plans to achieve post-Olympic targets in a range of areas*. Two of the key findings identified:

- For the sedentary and least active, informal physical activity participation in the community can be encouraged by capitalising on 'festival events' i.e.

events that do not necessarily involve participation In Olympic and Paralympic sports.

- Use should be made of the national platform of celebration by promoting locally owned and culturally relevant 2012 'festival effects'. This will develop and maintain the public's positive feeling towards hosting the 2012 Games and tap into the 'once in a lifetime' feel.

With the MFH initiative established to run until the 2012 Olympic and Paralympic Games and the 2014 Commonwealth Games members can realize the potential of the Games' "festival effects" to involve as many people as possible and to leave a lasting physical activity legacy.

Volunteering for the Games

Members wishing to volunteer should refer to the information currently available at: http://www.london2012.com

Helen Bristow, CSP

**A systematic review of the evidence base for developing a physical …*
ME Weed, E Coren, J Fiore, D Chatziefstathiou, L … - Canterbury: Centre for …, DH, 2008

Making Waves in the Community

As therapists, we understand the importance of taking regular exercise and following a balanced diet in order to promote health and wellbeing. However, taking regular exercise is not always easy, in particular with our amputee patients. Throughout the rehabilitation of our amputees, we encourage various forms of exercise and fitness programmes to enable our amputees to achieve the best possible outcomes with or without their prosthesis. It is often once amputees are discharged back into the community after their initial rehabilitation has been completed, that it becomes difficult, frustrating and often a challenge for them to return to some form of exercise or sport. Sometimes it may not just be their condition or reduced level of mobility that stops them from exercising easily. It can often be lack of time, confidence, energy, motivation or where to go in the local community.

We are familiar with the CSP's 'Move for Health' campaign and also the fantastic opportunites that have developed for promoting sports for amputees over the past couple of years – particularly with the build up to the Paralympic Games in 2012 and the Commonwealth Games of 2014. For example, The Amputee Games organised by LimbPower which are held annually at Stoke Mandeville, the Paralympic Potential Talent Spotting Days organised by ParalympicsGB, the Sports Programmes organised by The Limbless Association and the SPEEAD events (Sporting Prosthetics for Everyday and Elite Athletes with a Disability) organised by the University of Strathclyde and held in Glasgow and Loughborough in 2009.

Having participated in the above events, I would encourage all physiotherapists who are involved in amputee rehabilitation to try and attend some of these events with their amputees. The joy of watching amputees return to sport and achieve more than they ever thought they could, has been very humbling and rewarding. All these events have offered amputees the opportunity to try and 'have a go' at various sports in a controlled and safe environment with expert coaching and supervision.

Although these events are a taster for some amputees, the question arises as to how we as therapists can encourage and facilitate exercise in the community for our amputees on a regular basis?

At Queen Mary's Hospital in Roehampton, the therapy team has explored using local community services to encourage amputees to return to sport, in particular swimming. We do not have a hydrotherapy pool on site, but over the past few years, we have used hydro pools at other local hospitals as the need arose. We were aware that one of our local Amputee Support Groups called 'STEADY', who are based in Epsom, started using their local swimming pool on a regular basis. The STEADY group (Sharing The Epsom Amputees Daily Yomp) meet three times a week at the Rainbow Leisure Centre in Epsom. The ball started rolling as the STEADY group invited us to join them. A physiotherapist and rehabilitation assistant escorted one of our inpatient amputees to the swimming group. Immediately we saw the benefits gained by the new amputee. Due to the impressive facilities and support offered by the local swimming pool, we were keen to develop this opportunity further.

With the support from our Consultant in Rehabilitation and Therapy Team Leader, the Amputee Swimming Group is

now recognised and established and takes a regular place on our monthly calendar. Over the past eighteen months, we have accompanied twenty five new amputees to the swimming group. This has included unilateral and bilateral amputees of varying levels, both lower limb and upper limb amputees and of a wide age range. At each session, we take one amputee who is an inpatient from our rehabilitation ward. Some of our outpatients who can make their own travel arrangements to the pool, will meet us there too. Often seven or more amputees will be at the session. We have made contacts with the Rainbow Leisure Centre Manager who fully supports the group and has recently changed their own allocated 'Disability Swimming Session' to our slot. When possible, they allow us exclusive access to a double swimming lane positioned next to the hoist. The pool side staff are most helpful in assisting with the use of the hoist as necessary.

One of STEADY's aims is to 'help and support new amputees in their individual endeavours to regain, maintain and fulfil their new level of personal mobility and independence'. Joining their group once a month has allowed new and established amputees alike, the opportunity as part of their individual rehabilitation programme to gain confidence back into the community in a controlled and safe manner, therefore, helping develop vital physical and social skills.

Moira Burrows (Rehabilitation Assistant) and myself were fortunate to attend the 'Aquatic Therapy for the Lower Limb Amputee' course at Eastbourne District General Hospital in February 2009. We gained valuable skills in aquatic therapy which we have been able to apply to our Amputee Swimming Group. We have also developed a 'Patient Screening Form' which includes clinical and functional goals for the amputee.

There are numerous known benefits of exercising in water, which include improved joint range of movement, muscle strengthening, increased cardiovascular fitness and exercise tolerance. This, in combination with an increased level of freedom and independence, are potential benefits for the amputee. Whilst having the supervision from clinicians, they are also overcoming barriers of how to get from the public swimming pool changing rooms to the pool, learn the safest method of entry and exit from the pool and adapt to an altered technique of swimming. The group can also be used to assess as to whether a water activity limb is appropriate for the individual. In our experience we have found water activity limbs have not been beneficial for swimming.

Patient feedback from the group has been extremely positive, with some amputees saying they 'gained more out of one trip to the swimming pool than a few weeks they had spent in the therapy department'. Interesting?! They are all asking for more sessions. From a therapy perspective, the long term outcome of seeing amputees continue to attend the group after they have been discharged from the rehabilitation environment is very encouraging. In the future, we hope to formally evaluate the group with an appropriate quality of life outcome measure.

Swimming is just one form of exercise that we can promote for our amputees in support of the 'Move for Health' campaign. I would encourage other physiotherapists to explore opportunities and resources for their amputees outside of the clinical environment and back into the community. Do make links with local organisations – it can be manageable and practical.

Maggie Uden, Physiotherapist, Queen Mary's Hospital, Roehampton. maggie.uden@wpct.nhs.uk

Membership of BACPAR

Membership year runs from March 2010 to February 2011

Full Membership (£35) is available to current members of the Chartered Society of Physiotherapy, including Assistants and Technical Instructors.

Associate Membership (£35) is open to those from allied professions at the discretion of the Executive Committee.

Departmental Membership (£55) is available to a Physiotherapy Department of any size. This allows TWO members of the department to attend BACPAR events at the preferential rate. The department has only one vote at the AGM.

Student Membership (£10) is available to undergraduate Physiotherapy students. This entitles the student to be able to attend study events at the preferential rate, but they have no vote at the AGM.

A minimum of two national and two regional study events are run by BACPAR. The Annual General Meeting takes place every November. Membership enables you to have preferential rates at these courses. The BACPAR journal is published twice a year, spring and autumn, and is sent to all current BACPAR members.

Membership forms are available from the Membership Secretary (see contact details at the back of the journal), or can be downloaded from the iCSP web site.

How to Get Involved in Disability Sport

The short answer is; in just the same way as you would for non-disability sport. There are so many more opportunities these days. Find a sport or club that you like, turn up & volunteer, don't expect to be paid and make yourself indispensable.

The longer answer is a bit more complicated...
First find your sport:
If like Maggie you have patients who want to participate or become more active you may become involved just by helping them. In fact, that was how I first started when I had patients who wanted to run.
Are you already taking part in a sport yourself? If so, how well developed is their provision for disabled athletes and can you help there? Knowledge & understanding of the sport you want to get involved with does help, although it isn't essential.

If that isn't an option then look on the Parasport website (see the Parasport article on the next page) & you will find all the disability clubs within a 50 mile radius of your home, details of what those clubs provide and information about individual sports, what physical skills they need and how they are structured. You may want to contact an individual club or the sport's national governing body (NGB) to find out more. Having found your sport what do you have to offer? It isn't just a question of treating sports injuries, in fact that could be the least of it.

Visually impaired competitors often need guides; if you are fit and competitive you could become a guide for an athlete or paratriathlete & actually participate yourself. Many disabled competitors have altered biomechanics that will make them more prone to injury but will also reduce their efficiency in performing certain movements. A physio with a disability background can be very useful to a coach who is taking an athlete through a training programme by filling in the pathophysiological information that they need to target the programme specifically to the individual. Knowledge of prosthetics isn't yet on the coach training syllabus but providing that information can make all the difference. Why should a coach know how to deal with volume fluctuation or the best way for an athlete with diplegic cerebral palsy to stretch? What is normal practice to us is not necessarily common knowledge in sport. For example a paraplegic Paratriathlon competitor's transition time was reduced from 9 minutes (not competitive) to under 1.5 (highly competitive!) simply by being shown how to transfer properly from recumbent bike to racing wheelchair, not only was it much faster it was also safer for the paratriathlete & his helpers!

The barriers to activity and sports participation are well understood and the latest government initiative attempts to tackle that but people with a disability have added barriers that need to be broken down & you could help with that. Team mangers and volunteers need training in practical ways to deal with disability issues, with a bit of common sense and a bit of transferable therapeutic knowledge that you can provide they can become much more confident and effective in providing sporting opportunities for disabled people.
Getting involved with children's sport activities and seeing them achieve things they never thought possible is fantastic. It may not be strictly physio but the training you have will be really useful when you just go along to help. Contact Jannine Butler at Disability Sports Events (jannine@dse.org.uk) for more information on how to get involved.

Classification of competitors to ensure fair competition is essential in all disability sports as they become increasingly competitive, elite and professional. There are not enough classifiers in most sports and physios are probably the best profession at assessing physical impairment. Most sports and most disability groups have their own classification system which makes getting classified even more difficult. Disability Sports Events (jannine@dse.org.uk) run regular training courses for physiotherapists to train as classifiers for their events, many of which are for children. Not only is it great fun & fantastic to see the children achieve it is also great for improving your assessment skills!

Not every athlete is a potential Paralympian. Don't assume that you can become a squad physio to an elite Paralympic team overnight. It just isn't like that, grassroots sports participation is perfect for most people and the same applies to physiotherapists. You will meet amazing people, watch fantastic sport and have a great time yourself and you may eventually reach the lofty heights of elite sport but even if you don't you will have a brilliant time! The opportunities are out there... go for it!

Penny Broomhead, Physiotherapist

Useful contacts

Parasport: www.parasport.org.uk

Disability Sport Events: www.disabilitysport.org.uk

Paralympic Sports: www.uksport.gov.uk/talent

LimbPower: www.limbpower.com

The Limbless Association: Sports+ programme: www.limbless-association.org

STEADY Amputee Support Group: www.steady-epsom.org.uk

SPEEAD: www.strath.ac.uk/prosthetics/research/speeadsportingprosthetics/

English Federation of Disability Sports: www.efds.co.uk

Parasport

What is Parasport?

Parasport is a web based programme designed to inspire, engage, educate and signpost disabled people to high quality sporting opportunities. Parasport is a partnership between ParalympicsGB and financial services firm Deloitte and makes high quality information about disability sport accessible across the UK. With 80% of physical disabilities being acquired this information is vital to support people getting back into sport and supporting the sports industry in making it possible.

Parasport is also aware that a growing number of its users are people looking to support disabled people in the process of getting back into sport; people like you! The site has been designed so that virtually all of the information, guidance and support is shown in a way for parents, careers, guardians and anyone else can access and use it to support participation.

Benefits to the Physiotherapists;

- Free online tool with high quality information – a kind of "one stop shop" for disability sports information.
- Messages come via ParalympicsGB and therefore a high quality source.

What does it do?

Parasport has a host of features such as;

1. The Wizard – this allows users to input a disability and find out sports suitable for them to participate in. Many disabled people are unsure of their actual disability/classification. You would be able to guide the people you are working with to sports suitable for them to participate in.
2. Club data search – this allows users to enter their postcode and find high quality clubs/facilities local to them. Accessibility to clubs is one of the major barriers to participation so with the support of Parasport you would be able to actually find local opportunities and build relations with high quality clubs. You can now even list clubs you work with if they don't feature on your club search.
3. News and events – this allows users to promote news and events on the site and help build an online community sharing news, stories and experiences.
4. Volunteering, Coaching and Skills development – these sections of the site allow users to find information on other sport related opportunities as not all users will want to participate; or some will want to develop their participation to gain new skills.

Benefits to the Physiotherapists;

- Can educate/support their clients regarding club data, events, news and important messages as well as building potential partnerships with local sports providers.
- Can identify and support development of local provision.
- Mechanism they can use to support delivering organisational KPIs regarding disability inclusion and disability sport participation, if applicable?!!
- Saves time, money and resources regarding duplication for local need; just use Parasport!

What impact does it have?

1. Parasport gets on average 30,000 users visiting the site every month.
2. It works with most of the major government sports agencies (including Sport England, Youth Sports Trust, English Federation for Disability Sport, LOCOG, Volunteer England, Department for Children, Schools and Families and Department for Culture Media and Sport) to support delivering key national targets.
3. We also work with all of the Paralympic National Governing Bodies (NGBs) and growing numbers of non Paralympic NGBs.

4. We are also working with a wide variety of other services from the health, education, HE/FE, University, Cultural and social media industries.
5. We work with all 49 County Sports Partnerships.

Benefits to the Physiotherapists;

- You can get access to all of these networks by using Parasport and by maximising your regions presence and information on the site.
- Provides a legacy resource for you and they disabled community in your local area.

What now?

Try it out!! There will be feature and functions on Parasport that will be able to support you in your work. The ability to find high quality information to support you and your clients to lead them to regular physical activity and participation is something we are both looking to support!!

www.parasport.org.uk

LimbPower

LimbPower received charitable status at the end of November 2009. Our objectives are to offer relief to the physically disabled by aiding rehabilitation and improving the quality of life through the medium of recreational and competitive sports and arts, for the locomotor disabled. We aim to achieve these objectives through the provision of and access to facilities and opportunities for participation in sport and the arts.

Our first project was the Amputee Games launched in June 2008. The inaugural Amputee Games took place on 13TH-14TH June 2008, with 81 Amputees participants. Teams of eight amputees and two healthcare professionals took part in 13 different sports both recreationally and competitively: providing them with a pathway to join the individual disability sporting associations after the games, where they could progress their skills.

The second Amputee Games was also held at Stoke Mandeville Stadium on, 22nd-23rd August 2009, with 75 amputees and ambulant disabled participating from all over the UK from as far apart as Northern Ireland to Blackpool and Plymouth to Stockport. By operating an open programme we encouraged amputees of all ages and all abilities to "Have-a-go" at a wide range of sports, giving them the best opportunity to find a sport, which suits their lifestyle and ability. As a direct result of the games a new sitting volleyball squad has been established in Portsmouth, three amputees took part in the BPA Talent ID day at Brunel University and a number of participants have signed up to join our amputee trek to climb Mount Kilimanjaro in October 2010.

Catherine one of our more mature participants said, "Everyone was so helpful and encouraging and having the top coaches there was fantastic. As a result I have a completely different attitude to what I can still do with only one leg. I now plan to take up table tennis, bowls & perhaps archery, apart from my golf. You proved to me that my sporting activities need not be over because of my leg amputation".

For the younger amputee the Amputee Games is a great opportunity to be spotted by talent coaches from the British Paralympic Association as well as the individual sporting governing bodies. As well as taking part in the 13 Paralympic sports being demonstrated at the event participants can also talk to representatives from these and other sporting organisations throughout the games at the sports information centre. One youngster said "I've signed up for the BPA Talent day at Brunel University" and "this is the most fun I have had since becoming an amputee"

The 2010 Amputee Games take place on the 14th-15th August at Stoke Mandeville Stadium. To read more about the Amputee Games visit our website www.limbpower.com

Isle of Wight Randonnee

To support our amputees taking part in the Hike Kilimanjaro Trek, we are joining the Round the Island Bike Ride on the Isle of Wight. Organised by the Wayfarer Cycle Touring Club Sunday 2nd May. There are two route options, either 100km or 55km Clockwise routes. The ride is on the Bank Holiday, Sunday 2nd May 2010. Participant is free, but we are asking our team to pay a registration fee of £25 to cover the costs of a light lunch and refreshments and a donation towards the Hike Kilimanjaro Trek and the Wayfarer Cycle Touring Club. We are also asking you to raise sponsorship to support our amputees climbing Kilimanjaro. The target is up to you. If you don't yet cycle, why not come a long for a day out and meet some of the amputees taking part in, and supporting the trek. This is a great excuse for a get together and an opportunity to meet with and exchange Ideas and stories with other amputees. We will be meeting at a rendezvous point where teas and coffees will be served, along with a light lunch.

For more information on LimbPower or the Randonnee please contact Kiera Roche by email at Kiera@limbpower.com or by phone on: 07968760001.

LimbPower, Registered Charity Number 1132829
www.limbpower.com

Sitting Volleyball

Sitting volleyball is an adapted version of volleyball that allows anyone to participate, including those with a disability. It is a fast, exciting team sport that can be played at a local, national or international level.

Despite a popular misconception, sitting volleyball is not a wheelchair discipline; rather, players remain seated on the court. This characteristic makes the sport well suited for, and attractive to, people with amputations, lower limb disabilities, players returning from injury during rehabilitation, to name but a few.

In Sitting Volleyball, the international rules for Standing Volleyball apply in principle, with amendments allowing for a sport for disabled players: during play, a player must touch the court with some part of their body between the buttocks and the shoulders, and you are able to block the serve. Sitting Volleyball is played on a smaller court (meaning quicker points and faster, more exciting play) with a lower net to account for the players' seated positions.

The benefits of playing Sitting Volleyball are widespread, especially so for those recovering from an accident or amputation. Physically, the sport develops upper limb and spinal strength, reflexes, and range of movement. Sitting volleyball is ideal for core stability and provides a good cardiovascular workout.

Furthermore, the psychological benefits can be remarkable: for individuals to be able to participate in a new sport where disability is not a hindrance (and can even become advantageous), to play with disabled and able-bodied players and even be in the running for GB selection, can give unprecedented morale boosts.

To play at international level, there are certain classification requirements that need to be met in terms of disabilities: athletes need to be classified by a British Paralympic Association Classifier. However, there are no restrictions to who can participate in Sitting Volleyball at a Club level.

Sitting volleyball originated in the Netherlands and was introduced to the Paralympic Games in 1980 as a men's sport, and later as a women's sport at the Athens Paralympics in 2004.

Great Britain has competed at a high level in the past, but has not had much involvement with Sitting Volleyball since 1991. However, since the announcement of London 2012, the GB programme has been re-established. Volleyball England, the recognised National Governing Body for Volleyball in all its forms, including Volleyball, Beach Volleyball and Sitting Volleyball in England, is overseeing the Development Programmes ahead of London 2012.

The GB Sitting Volleyball Development Programmes hopes both men's and women's squads will compete in the London 2012 Games: the first time Great Britain will put forward two Sitting Volleyball teams to compete in the Paralympics.

Recently, Volleyball England announced the formation of the first ever Women's Development Programme for Sitting Volleyball in the sport's history. The Development Programme aims to recruit and develop players for top-level competition in time for major competitions such as London 2012 Paralympic Games, and is currently being led by John Bestebroer, who previously coached the Dutch Women's National Sitting Volleyball Squad to win the Bronze medal in Beijing 2008.

The announcement was made alongside confirmation of the programme's 2010 schedule of events, which included recruitment drives, training sessions and competitions at devoted "Sitting Centres" in England, Scotland and Wales. To date, the ten "Sitting Centres" are at the following locations:

- Merseyside
- Portsmouth
- Kent
- Birmingham
- Scotland
- East London Lynx
- East Midlands
- Surrey
- Essex Pirates
- South Wales

The Sitting Centres form part of the three-tiered Player Development Pathway: the Sitting Volleyball Centres will drive activity such as hosting training days and recruitment drives; the second tier will enable players capable of progressing to train weekly with the GB Men's coaching staff; the top tier will select squads for the major competitions.

Lisa Wainwright, CEO of Volleyball England, said, "We aim to recruit as many players for sitting volleyball wherever they come from, and to raise the profile of sitting volleyball as a crossover sport capable of being played by both able-bodied and disabled players, male and female, young and old.

"These are exciting times for Sitting Volleyball and the future looks very promising. The formation of a Great Britain Women's Sitting Volleyball Development Programme comes at a time when Sitting Volleyball is continuing to grow ahead of 2012.

"Our GB squads are by no means finalised, we are still recruiting via our regional centres. We've already seen considerable growth of interest in the sport and now have around 150 people playing regularly in the UK, up from just 40 in summer 2009. I would encourage anyone who's interested to get involved with our programmes: you never know, you could be representing your country in a few years' time on a world stage!"

The best source of further information is Volleyball England's web site:

http://www.volleyballengland.org/sitting

The Player's Perspective

I first got involved with sitting volleyball when I was asked by Portsmouth DSC to attend the Amputee Games at Stoke Mandeville Stadium, August 2009. I am a bilateral amputee (below knee) and was reluctant at first to get involved, but so glad I did have an opportunity to have a go at it and how much I enjoyed playing this sport without using my prosthetic legs. Shortly after this Portsmouth Sitting Volleyball Team started up and I started to attend their training sessions once a week.

The team is currently involved in the Grand Prix Competitions. I have played in two of these to date as well as attending an awareness day. I thoroughly enjoyed playing in the competitions, especially as I was approached by representatives of the Great Britain Sitting Women's Volleyball Team to attend their training days which really did give me a boost of confidence which I seemed to have lost when losing my legs in 2008.

Since becoming disabled Sitting Volleyball has given me the opportunity to be involved in a sport, motivating me to regularly exercise and keep fit. Participating in this sport has also provided me with an opportunity to meet other people both able and disabled bodied.

When I first became disabled I could never visualise being involved in any form of sport however looking back I am inspired to think that I can participate and therefore encourage others in a similar situation to myself to have a go at Sitting Volleyball.

Charlotte Hughes

The Physiotherapist's Perspective

Following the Amputee Games in Summer 2009, when we had a chance to watch the GB Men play Sitting Volleyball, and have a go ourselves, a Sitting Volleyball Club was set up in Portsmouth.

I was there from the first training session, and have played in the three Grand Prix tournaments that have been held so far. I am primarily there as a player, but I do take along a small first aid kit just in case-- so far, I've strapped a hyperextending thumb!

I train and play alongside some former patients, which is a great way of secretly monitoring their progress! Seriously though, it has been fantastic to see how strength, motivation and adjustment to their amputations have developed.

As Sitting Volleyball is played sitting on the floor without prosthetic limbs on, it may be hard for some prosthetic Physiotherapists to see the benefit for their patients. I would say, come and watch us, or check out You Tube, and you'll see!

Sitting Volleyball develops upper limb and spinal strength and range of movement. It also develops reflexes, core stability and provides a good cardiovascular workout. It even 'toughens up' the ischial tuberosities – so important for ischial-bearing transfemoral patients!

The psychological benefits mustn't be overlooked. To be able to participate in a new sport where disability doesn't matter, play alongside and against able-bodies players and, for some, be selected for GB training, gives a huge morale boost.

In my Physiotherapist role I'm able to inform users of the DSC, be they prosthetic, orthotic or wheelchair patients, about Sitting Volleyball and encourage them to come to training. I urge you to support Sitting Volleyball England and promote it among your patients – you never know, you may get to see them play Sitting Volleyball at the Paralympic Games in 2012!

Katharine Atkin, Specialist Physiotherapist in Amputee Rehabilitation, Portsmouth DSC


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Trent International Prosthetic Symposium

Last May I had the privilege of attending the Trent International Prosthetic Symposium (TIPS) with colleagues from the Upper Limb Team at Queen Mary's Hospital, Roehampton. This article aims to give an overview of the conference including a personal reflection on its relevance to BACPAR members.

TIPS originated a few years ago in Nottingham – the brainchild of two Occupational Therapists and a Prosthetist – as an educational meeting dedicated to the management of upper limb amputees and limb deficient children. The meeting has since developed into an international symposium that takes place every four years and is now organised by ISPO UK. Burleigh Court Conference Centre in Loughborough was the venue for three days of presentations, workshops – manufacturers and instructional – and an exhibition (BACPAR stand included!) for over two hundred delegates from the UK, Europe and the 'rest of the world'; a total of fourteen countries were represented in all.

Well organised, the overall calibre of presentations was high and ranged from clinical case studies to engineering research. There was an MDT focus with a variety of disciplines presenting. Guest speakers included John Miguelez, prosthetist and founder of Advanced Arm Dynamics, one of America's leading providers of upper extremity prosthetics, who set the scene for the 3 days with his introductory lecture on 'Upper Extremity Prosthetics: State of the Science', outlining developments within the specialism where nowadays levels such as shoulder disarticulation and partial hand can be successfully fitted with functional prostheses. Kirstin Gulick an OT, also from the USA, spoke about her unique and intense approach to training. Frank Letch from the UK was born with bilateral major upper limb deficiencies and presented his 'Feet first' talk, an eloquent and inspirational account of a very fulfilling life – he is a keen cook and his presentation included a demonstration of cutting an onion with a very sharp knife with his feet!

There were over forty free papers presented. Delegates learned of new and developing technologies such as voice controlled prostheses and a multi-movement hand prosthesis with wrist flexion and extension. Direct intra muscular input, targeted muscle innervation and prosthetic electronic skin attempting to integrate sensory feedback were further advances. The ITAP (intraosseous transcutaneous amputation prosthesis) team based at Stanmore presented the first upper limb ITAP recipient (I anticipate more information about this procedure in future BACPAR journals). Amongst the several prosthetic manufactures was Touch Bionics who presented pro-digits; their workshop demonstrated the i-Limb, a product which has attracted media attention recently.

Despite these technical developments a case was made for using conventional adapted prostheses and devices as strategies for good functional outcome, especially in children with congenital loss. There were examples of innovative clinical practice, for example where modifications enabled an amputee with upper limb loss and spinal injury gain wheelchair control.

There was much for the Roehampton team to take away to consider for application to service delivery; amongst many developments of particular interest was an informative DVD resource for children with congenital limb deficiency, and tips about the use of the mirror box with pain diary will complement our current practice.

The UK was well represented with speakers. In addition to ITAP, presentations were made by UK doctors, prosthetists, engineers, OTs and one physio. If there had been a prize for the most presentations Dr Soori from Roehampton would have won it! He had two posters –'Osseointegration – a case study' and 'Dermatological conditions in the Upper Limb Amputee', and he presented twice from the platform. 'Doctor, why can't I have an I-LIMB?' made the case for a robust procedure when applying for funding to PCT commissioners for special cases. His second platform presentation 'Management of musculoskeletal symptoms of the contralateral limb in upper limb amputees' presented evidence of increased prevalence of secondary physical problems in the intact limb of upper limb amputees (he drew comparison with lower limb amputees) and the need for an integrated, proactive approach with both prosthetic & non-prosthetic interventions and follow-up to identify early signs of secondary problems.

TIPS gave me an opportunity to complement Dr Soori's second presentation by sharing the findings from a recent physiotherapy audit that went some way to illustrate the case for physiotherapy forming part of a proactive approach to minimising secondary physical problems – or overuse injuries as they are commonly referred to – in the upper limb amputee. Please see 'The upper limb amputee – is physiotherapy just to treat overuse injuries?'

From a personal perspective, perhaps my interest in the upper limb amputee is greater than other BACPAR members as I had taken a proactive approach to increase the physiotherapy role with this patient group but this wasn't at the expense of my other responsibilities. Upper limb amputees made up a small number of my overall caseload, and had no significant impact on the capacity of the department. This development triggered in-service teaching sessions on assessment of the shoulder girdle for example; all therapists in the amputee therapy team have benefited since lower limb amputees can also present with upper limb musculoskeletal related problems. But I should emphasise that in addition to treating overuse problems physiotherapy has an important role to play in the prevention of these in both groups of patients and in the amputee with multiple limb loss.

Please see 'The upper limb amputee – is physiotherapy just to treat overuse injuries?' to find out more.

The knowledge gained from TIPS undoubtedly contributes positively to the physiotherapy role with the upper limb amputee and I would highly recommend anyone who has this responsibility – or who believes they should have – to attend future TIPS symposiums.

Mary Jane Cole, Physiotherapist

NASDAB Re-instated

UK data on amputations, its collection, analysis and report writing ceased in 2007 as it became impossible to illicit further funding to cover the costs of managing quite complex data collection, data quality checking, report writing and updating the website.

The Directorate of Prosthetics and Orthotics and Podiatry at the University of Salford will now take on the collection of data from prosthetic centres, the collation and data checking of information and the production of an electronic annual report similar in style to previous NASDAB reports - with no further cost to prosthetic centres. The University of Salford makes suggestions for maintaining and potentially improving the current quality of NASDAB; such proposals are supported by the NASDAB steering group and commends them to all manages of prosthetic services.

BACPAR values the collection of this important data to clinical practice and service delivery and welcomes these developments.

The Upper Limb Amputee – is Physiotherapy Just to Treat Overuse Injuries?

Introduction

'Trent International Prosthetic Symposium 2009…..for all professionals involved with upper limb prosthetics'. There were approximately forty OTs registered but where were the physiotherapists? To my disappointment I was one of only three physiotherapists, one of the other two works solely with upper limb patients and the other retrained and now practises as a prosthetist; neither was from the UK.

Why was I there? The physiotherapy role in the management of the upper limb amputee has evolved at Roehampton and I needed to gain more knowledge to apply to my practice. I also wanted to take advantage of this occasion to share the experience of a developing service with MDT colleagues.

For the purpose of this article I will summarise my presentation which was based on a physiotherapy audit with this patient group.

Background

Historically, therapy input to patients with upper limb loss or absence has been predominantly the responsibility of OTs. Despite British Society of Rehabilitation Medicine recommendations for physiotherapy in the post-amputation phase (BSRM, 2003) there are no national physiotherapy standards of practice for this group of amputees. The little literature available with reference to physiotherapy is in relation to the management of over use injuries only (Jones et al 1999).

Anecdotal evidence suggests that physiotherapists commonly only assess and treat upper limb patients when referred with musculoskeletal problems post prosthetic fitting and have little role in physically preparing patients for prosthetic use.

Currently there are no national physiotherapy practice standards or guidelines for these patients.

Method

In 2004 a regional questionnaire survey by a group of specialist physiotherapists working in DSCs in the South Thames region – PIRPAG (Physiotherapy Inter Regional Prosthetic Audit Group) – identified varying physiotherapy practices, referral patterns and different perceptions by the MDT of the physiotherapist's role in the management of this group of patients. See BACPAR journal Autumn 2005 Issue No 23.

Findings from this survey indicated that there is a role for physiotherapy and recommendations were made for each Centre (participating in the survey) to introduce and establish standards based on the findings and in relation to local needs and resources. The presence of local standards would guide clinical practice, facilitate audit and service development. Consequently by 2006 standards were agreed and put into practice at Roehampton.

To reflect subsequent physiotherapy provision, retrospective audits of the physiotherapy service to this patient group, with reference to the standards, were performed for all primary upper limb patients – adult and paediatric; all levels other than digit loss – attending Roehampton during 2006, the first year of implementation, and 2008, for comparison purposes. Established amputees (i.e. those who have completed their initial period of prosthetic rehabilitation) referred to physiotherapy during these periods were also audited.

To place this into context, the following figures should be considered:

Roehampton has an upper limb population of approx 480 patients. 60% with acquired loss, 40% are congenital. On average there are 10 new patients a year. See table 1.

Roehampton Patients with upper limb loss			
Population	Acquired	Congenital	Av no. primaries / annum
480	60%	40%	10

Table 1

Findings

The recommended standards for physiotherapy practice at Roehampton were mostly met i.e. an increasing number of amputees with upper limb loss or absence referred to the Centre are routinely seen by a physiotherapist at some stage in the period of prosthetic rehabilitation, most frequently at or shortly after the first fitting appointment. Established amputees who present with musculo-skeletal or pain related problems are referred for a physiotherapy assessment. Areas for improvement within the service were identified e.g. how and where physiotherapy interventions are documented for example. Table 2 reflects the numbers of patients seen.

Year	Total no. of UL pts s/b PT	Primaries	Established	Total no. of PT sessions	In/outpatient
2003	7	2	5	37	2 inpatient
2006	15	4	11	40	1 inpatient
2008	20	5	15	64	1 inpatient

Table 2

Of the different interventions, advice on posture and minimising risk of over use injuries was given to virtually all patients. See Table 3.

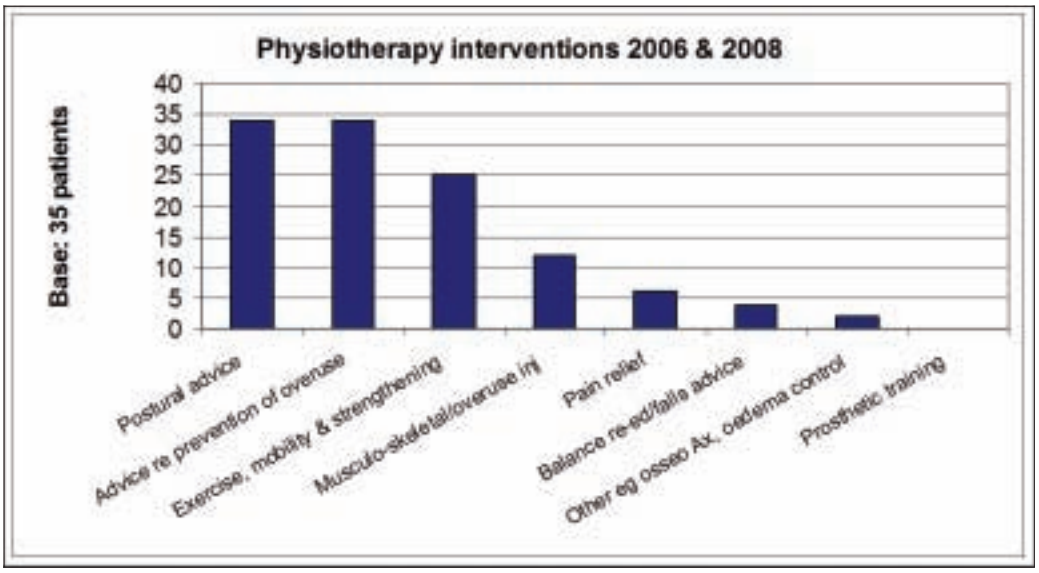

Table 3

Discussion

The standards for physiotherapy practice at Roehampton were met in the main, and the findings reflect an evolving physiotherapy service.

In summary, more primary patients with upper limb loss or absence are now seen by a physiotherapist at some stage in the early period of prosthetic rehabilitation. The OTs routinely see all primary upper limb patients and now ensure that physiotherapy is part of the treatment ''package''; this screening is increasingly performed by the prosthetist and consultant in rehabilitation as well; in other words, in the past an patient with upper limb loss may only have seen a physiotherapist if they presented with pain or a musculo skeletal problem, physiotherapy assessment is now becoming routine as part of prosthetic rehab.

Nonetheless, would physiotherapy assessment, advice and exercise at the primary appointment better prepare the patient for fitting and prosthetic training?
An increasing number of established amputees who present with musculoskeletal or pain related problems are referred to physiotherapy; is this because of a greater awareness by the team of the benefits of physiotherapy, or simply that there were coincidentally more of these presentations in clinics? If the latter, had patients received physiotherapy advice and exercise early in their rehab? The audit suggested that these patients had not seen a physiotherapist.

The OTs and PTs are currently piloting an information leaflet to support good postural practice and awareness of secondary musculoskeletal complications with the aim of this being given to all patients at the earliest opportunity.

Documentation with respect to self-referral and physiotherapy outcomes needs to improve. An ethos of self-referral is encouraged post primary episode for all patients attending the centre but this information would seem to be conveyed verbally only.

Within the therapy team, physiotherapy knowledge and skills are developing to ensure clinical effectiveness for this patient group. The physiotherapist is now recognised as a core member of the upper limb team, for example contributing and learning through monthly meetings where the upper limb caseload is discussed.

Conclusion

The initial survey of physiotherapy provision to patients with upper limb loss prompted local standards for practice.

A proactive approach was taken by the team and the role of the physiotherapist is becoming established. Audit affirms practice and reflects scope for continuing development.

The team believes physiotherapy contributes positively to an holistic approach to the rehabilitation of this group of patients.

Post presentation discussion

The presentation prompted some questions from the floor; one enquired about the impact of this development to the overall therapy service in terms of time and resources.

With respect to the total number of amputees seen by PTs in 2008 8% were Upper Limb. In terms of overall physiotherapy patient contacts, upper limb patients accounted for just 2%.

A further question challenged the issue of who should assess and manage associated musculoskeletal problems i.e. the specialist prosthetic physiotherapist or should they be referred by the rehab consultant directly to physiotherapists with specialist musculoskeletal skills?

In my opinion the specialist prosthetic physiotherapist should, at the least, perform an initial assessment. The patient can gain considerable benefit from the opportunity this provides to receive advice in relation to posture, pain management and prevention of problems associated with overuse; sufficient knowledge and understanding of prosthetics and the use of the remaining arm are as essential in providing appropriate advice as skills to assess and treat musculoskeletal problems. The location for continued physiotherapy will be determined by the patient's home address and onward referrals are made in relation to the patient's convenience.

A post script reflection

Shortly after my TIPS presentation, co-incidentally, and in quick succession, I assessed and treated two primary upper limb amputees with shoulder capsulitis. Neither patient had received any physiotherapy whatsoever until I first saw them. Their stiff and painful shoulders limited their functional independence and overall well-being. Whether these presentations are a consequence of the trauma of surgery and limb loss or through a lack of post operative mobilisation is unknown and debatable but it raises the question about the role of physiotherapy at the post-operative stage. We provide it routinely to lower limb amputees, why not to upper limb amputees?

As prosthetic physiotherapists, yes, we mostly treat lower limb amputees but here rehabilitation routinely includes advice towards preventing or minimising associated musculoskeletal problems. *The upper limb amputee – is physiotherapy just to treat over use injuries?* I believe not. There's a real opportunity for physiotherapists – prosthetic specialist and non-specialist – to be more proactive with this small patient group. There is research, admittedly sparse, that supports the premise that prevention is the best approach to managing overuse injuries and that identifying and treating symptoms at their onset can delay or possibly limit the development of serious overuse injuries (Gambrell, C 2008). As physiotherapists we have the skills to do this.

Future work could explore the impact of earlier physiotherapy on long term outcomes e.g. incidence of overuse.

I hope this article will prompt members to reflect on our practice with this small but nonetheless significant group of amputees.

Readers are welcome to express their views on this topic by sending them to the journal editor for the 'Your Voice' section.

Mary Jane Cole, Physiotherapist

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Vascular Amputee Rehabilitation Study Day in Norwich: a Student's Perspective

A collaboration between Norfolk Community Health and Care and RSL Steeper recently brought together health professionals and students with the aim of disseminating knowledge in the area of vascular amputee rehabilitation. The event took place on 19th September 2009 at the University of East Anglia at a reasonable cost of £50 per head. The day was well attended by people from across the eastern region from a variety of disciplines, such as nursing, physiotherapy, occupational therapy, doctors and prosthesists.

Lectures

The day began with a welcome talk by Dr Ramakrishna, the consultant in Rehabilitation Medicine at Norwich Disablement Services Centre followed by a first-rate talk by Mr Morrow. His view as a vascular surgeon at the Norfolk and Norwich University Hospital (NNUH) focused on lower limb ischaemia, from causes, through to symptoms, assessment and finally surgery. The talk was very well received by the health professions attending, being "informative", "interesting" and "pitched at the correct level". I myself felt fortunate to have the opportunity of asking questions of such an expert practitioner in the field.

Professor Saleh followed this with his lecture on Reconstructive Amputation Following Trauma. A world authority on reconstructive surgery, Professor Saleh gave a thought provoking presentation on the way in which surgeons can sometimes view amputations in a negative light, often seeing it as a failure. Instead, the surgeon can take a more positive position by making a real difference to the patients remaining residium, through reconstructive considerations such as properly treating the bone for better prosthetic adaptation and maximising the padding of the residium.

Workshops

In all we were offered choices between 8 different workshops. Being a 1st year MSc student in Occupational Therapy, I felt that attending a Basic Prosthetics workshop would give me a good understanding of prostheses for possible future work in amputee rehabilitation. The workshop was run by Bob Rossiter, manager and senior prosthesist for RSL STEEPER at the Norwich Disablement Services Centre. Bob gave us an overview of the different amputation levels and how these may affect the prosthetic user, followed by details on the different types of prostheses, their materials and capabilities. Again, there was an opportunity for questions and answers which I always find valuable.

Rachel Murchison, a Diabetic Podiatrist, had everybody absorbed by her passionate and enthusiastic workshop on Diabetic feet. Her focus on neuropathy and ischaemia has enhanced my understanding of the complexities frequently presented in diabetes.

My final session ended with a workshop on Intermittent Claudication run by Loma Holmes, a Vascular Nurse Specialist. Her talk revised some of the earlier points made by Mr Morrow with the addition of providing a useful insight into an exercise programme for vascular disease patients at the NNUH. This illustrated effective therapy in action where patients are encouraged to participate through self-management of their disease.

Attending a professional study day for the first time, I was unsure whether the lectures and workshops would be beyond my understanding. This proved not to be the case as the organisers and speakers succeeded in addressing a variety of different levels of learning needs.

Extra bonus' to the Norwich Prosthetics Study Day were a Certificate of Achievement and a very delicious buffet lunch (cookies the size of dinner plates!), during which RSL Steeper, Blatchfords, Otto Bock and Ossur displayed their impressive technology.

Following on from the success of this initial event, the organisers anticipate holding a similar event next year which I look forward to attending. Based on suggestions from the feedback forms, future subjects covered may be phantom pain, gait re-education, core stability, pain management, orthotics, prosthetic perspective on surgery, upper limbs, prosthetic patient assessment, hydrotherapy, paediatrics/congenital deformities, and amputees and sport.

On a personal note, I valued the different health professional's perspectives and the opportunity to meet and talk with a wide range of people working with amputees which has enhanced my Continuing Professional Development. In my mind, the true achievement of the day was the sharing of knowledge which the delegates were able to take with them back to their own sphere of practice.

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Measuring outcomes of amputee rehabilitation: a service review

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1. Introduction

At Queen Mary's Hospital SIGAM grading[1] (Special Interest Group in Amputee Medicine) is used to classify amputees according to functional mobility, but there are concerns that it is subjective and lacks sensitivity to change.

Recently the therapy team selected the Timed Up and Go (TUG) test and Two Minute Walk Test (2MWT) to monitor progress of primary amputees at discharge and 3 week and 6 month follow-up, and for established amputees attending for new prescription or 'top-up' therapy. From January 2007 to December 2008 424 episodes of care have been recorded by the team (primary n=218).

Objectives of this review:

- Present trends from the first two years of data
- Investigate how the measures are, and can be, used to inform service provision
- Explore implications for quality of service and future developments

2. Methods

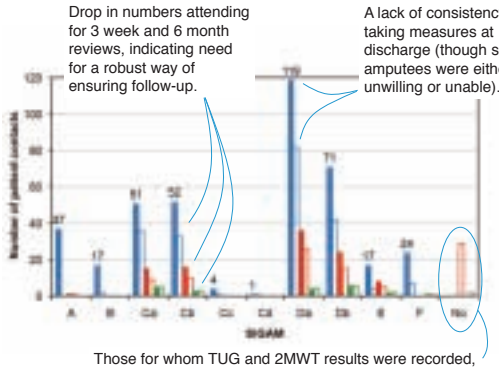
Many measures are used in amputee rehabilitation[2], but timed walk tests have been suggested as a 'gold standard' measure of amputee mobility[3].

TUG (the time to complete a sit-to-stand, 3 m walk, 180° turn, 3 m walk and stand-to-sit[4]) has shown good reliability and adequate concurrent validity for amputees[5], but has a ceiling effect[6]. 2MWT (the distance walked in 2 minutes over smooth, level ground) has been shown to be reliable and responsive to change during rehabilitation and recovery in amputees[7,8].

Tasks included in TUG are highly relevant to community mobility demands (for non-disabled, employed adults, 60% of walking bouts are ≤30 s with ≤21 steps). Two minutes of continuous walking is at the upper end of typical daily requirements (93% of bouts are ≤2 min)[9].

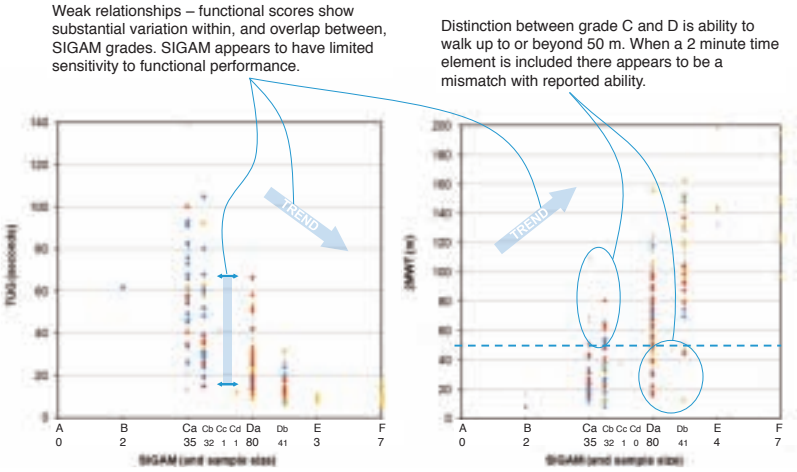
3.a Numbers on database

Figure 1: Total number of subject contacts on the database according to SIGAM grade (solid bars: discharge, 3 weeks, 6 months) and the proportion for whom outcome measures were recorded (outline bars:)



3.b Comparison with SIGAM

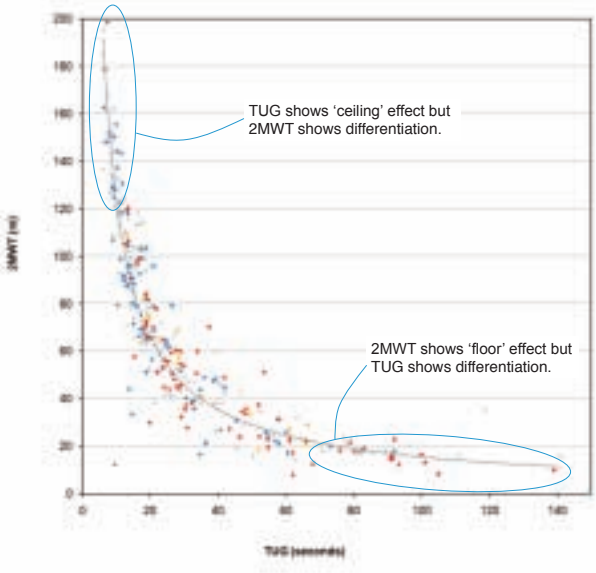
Figure 2: TUG and 2MWT against SIGAM for all entries at discharge, coloured according to cause of amputation (PVD n=73, Trauma n=41, Diabetes n=41, Other n=49)



SIGAM grades (based on amputee self-report) are intended to give a representation of overall mobility so functional measures indoors over smooth terrain may not be directly equivalent. However this comparison does raise concern over the subjective nature of SIGAM assignment, and it seems important to have objective functional measures to inform treatment and monitor progress.

3.c Comparison of TUG and 2MWT

Figure 3: Comparison of 2MWT against TUG for all entries at discharge, coloured according to level of amputation (Transtibial n=87, Transfemoral n=75, All Bilateral n=17, Other n=25, Trend line)



Strong relationship between TUG and 2MWT gives a sense of mutual validation. The fact that the relationship is not linear supports use of both measures.

This type of graph may be useful for justifying rehabilitation input and informing patients – setting realistic expectations or encouraging continued rehabilitation.

3.d Individual cases

So far only nine episodes of care have the complete set of three recorded time points so it is not yet possible to define trends of progress over time. Despite this limitation, some individual cases can be described:

1. 57 year old male with unilateral transfemoral amputation
   - Mid range measures, but at 3 weeks the scores were nearly identical to those at discharge
   - Prompted therapist to question the individual about rehabilitation work at home, he reported doing very little
   - Measures allowed objective monitoring and highlighted a case of concern where further support may be necessary.

2. 83 year old male with bilateral amputation from Peripheral Vascular Disease (PVD)
   - Substantial deterioration in measures at 3 weeks
   - Just before follow-up had fallen and bruised ribs; scores reflect resulting insecurity
   - Therapist was satisfied that no changes to rehabilitation were needed and the individual should improve naturally; this was confirmed by the scores at six months.

4. Conclusions & further work

- SIGAM shows weak relationship to both measures, with concerns over subjectivity.
- TUG and 2MWT results show a strong non-linear relationship, giving a sense of mutual validation and supporting use of both measures rather than only one.
- Trends seen by cause or level of amputation may be useful for informing amputees' expectations and supporting management decisions.
- Individual cases highlight the value of objective measures to prompt questioning of rehabilitation progress.

- Reductions in numbers assessed at each stage of follow-up and various inconsistencies in data entry are being addressed by a multi-disciplinary team.
- TUG and 2MWT are very specific (limited set of tasks in a controlled environment), so in addition to SIGAM an overall mobility measure is being considered – the Locomotor Capabilities Index[10].
- At the Centre there is currently no systematic measurement of quality of life; this is being considered.

[1]Ryall et al. Disabil Rehabil 2003;25(15):833-44
[2]Miller & McCay. J Prosthet Orthot 2006;18(1S):2-7
[3]Condie et al. J Prosthet Orthot 2006;18(1S):13-45
[4]Podsiadlo & Richardson. J Am Geriatr Soc 1991;39:142-48
[5]Schoppen et al. Arch Phys Med Rehabil 1999;80(7):825-8
[6]Deathe & Miller. Phys Ther 2005;85(7):626-35
[7]Brooks et al. Arch Phys Med Rehabil 2001;82:1478-83
[8]Brooks et al. Arch Phys Med Rehabil 2002;83:1562-5
[9]Orendurff et al. J Rehabil Res Develop 2008;45(7):1077-90
[10]Gauthier-Gagnon & Grise. Arch Phys Med Rehabil 1994;75:1309-14

NHS Wandsworth

Heart of England Amputee Service Redevelopment

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Department of Vascular Surgery, Heart of England NHS Foundation Trust

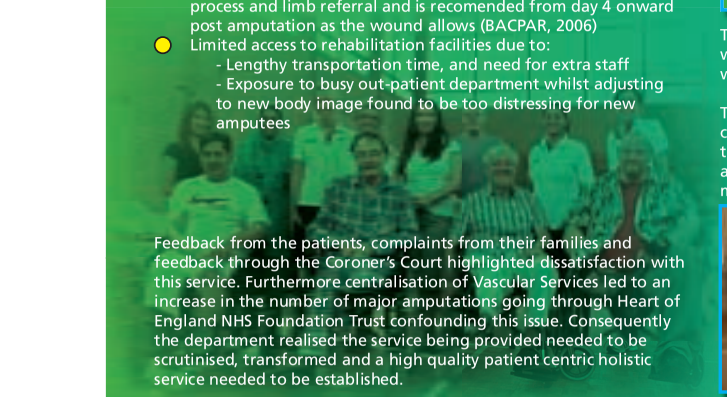
A year ago at Heart of England NHS Foundation Trust a comprehensive assessment of the amputation service was undertaken through clinical audit showing average amputee bed stay at 55 days. The BACPAR (British Association of Chartered Physiotherapists in Amputee Rehabilitation) Guidelines for amputee care were not being met on many levels. There was no pre-operative contact for patients with physiotherapists and occupational therapists, and post operative therapy-patient contact levels had been low. Gymnasium facilities were remote from the Vascular Ward, and there was limited equipment available to rehabilitate patients with on the ward. Patients and carers were not involved in rehabilitation and discharge planning and Physiotherapists were not available to discuss the process of amputation and to individualise rehabilitation goals with patients pre-operatively.

55 Days

Community resources were not being fully utilised and consequently patients were staying at risk of hospital acquired infection in the acute trust when no longer requiring medical/ surgical input. Links with the West Midlands Rehabilitation Service and Limb Fitting Centre were not established and outpatient rehabilitation was not being used effectively with no clear rehabilitation goals and outcome measures being used to determine function and success of rehabilitation.

This led to:

- Poor patient satisfaction with services – leading to patient and carer complaints with the service.
- Increased time away from home and family
- Increased time in hospital and therefore exposure to hospital acquired infections
- Decrease in moral of patients and staff who were unable to provide the care they felt was their duty
- No organised interaction with other amputees
- No Ppam aiding (Pneumatic Post Amputation Mobility Aid) as an in-patient due to lack of time and resources Ppam aiding has a beneficial effect on wound healing and speeds the ambulatory process and limb referral and is recomended from day 4 onward post amputation as the wound allows (BACPAR, 2006)
- Limited access to rehabilitation facilities due to:
  - Lengthy transportation time, and need for extra staff
  - Exposure to busy out-patient department whilst adjusting to new body image found to be too distressing for new amputees



Feedback from the patients, complaints from their families and feedback through the Coroner's Court highlighted dissatisfaction with this service. Furthermore centralisation of Vascular Services led to an increase in the number of major amputations going through Heart of England NHS Foundation Trust confounding this issue. Consequently the department realised the service being provided needed to be scrutinised, transformed and a high quality patient centric holistic service needed to be established.

'LEAN' NHS

The vascular department decided to use LEAN principles to redevelop the amputee service, an innovative new way of addressing problems within NHS pathways. LEAN is the concept of assessing current problems and involving the whole multidisciplinary team to problem solve how to address the issues and come up with realistic achievable goals to improve outcomes.

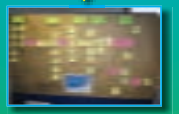
THE LEAN PROCESS

STAGE 1
A process by which every step of the current pathway is analysed is the 'value added' processes the 'non value added' processes assessed

STAGE 2
If money was no object what would we want our service to be like? We were encouraged as a team to be imaginative and creative. This also proved to be an excelled team building exercise.

Current State Mapping

Blue Sky Thinking



Future State Planning

STAGE 3
The MDT then planned our desired 'future state' with only value added processes. All MDT members knew their role in the pathway and a plan was made to implement these changes.

The outcomes to be addressed were length of stay (LOS), amount of therapy contact on the ward, timely Ppam (Pneumatic Post Amputation Mobility Aid) aiding and patient satisfaction with the aim of creating patient centric holistic care.

The team set up a three month pilot of increased therapy staff that were ward based and created a ward based gym so patient could access rehabilitation facilities easily. The aim was to create a 'rehab ethos' on the ward and get patients motivated and rehabilitated as quickly as possible post operatively. The results were re-audited during the pilot to assess outcome measures and to ensure we were successful in addressing the issues raised at the LEAN event.

Results

The pilot was a great success receiving excellent patient, carer and staff feedback

The amputee patients stay and experience was re-audited during the pilot. The noted benefits of the ward based gym and the increased level of therapy staff during the pilot included:

- Pre-op exercises and optimisation regimes prescribed and the rehabilitation process explained by the physiotherapist with input from the vascular nurse as required.
- Information and education was provided by physiotherapist to the patients and relatives, booklets created containing all relevant information required post operatively.
- Pre-op site visits and wheelchair assessments by the occupational therapists
- Pre-op referrals to oak tree lane (limb fitting centre) if patients to have an amputation, the vascular physiotherapist had regular contact with the consultant and physiotherapists at the limb fitting centre to ensure patients were being optimised appropriately.
- Timely rehabilitation by a dedicated team of vascular therapists who are on the ward to liaise with MDT and relatives as required
- Accumulation of knowledge and skills of stable staffing. The development of a specialist team.
- Education for patients on long tem conditions, mobility and advice on smoking cessation to help prevent future admissions by the rehabilitation team.
- The joint occupational therapy/ physiotherapy technician was a new role and the benefits of this role have been shared with other services in the hospital to begin to utilise joint therapy working as per the work force plan.
- The ward staff have benefitted from having therapy staff on hand to encourage the rehabilitation ethos on the ward and have assistance as required transferring difficult patients and ask questions regarding discharge planning.
- The physiotherapist attend the doctor's ward round daily, which enhanced mutual understanding between clinicians of different disciplines roles, also ensuring patients were referred as early as possible.
- Opportunity for patients to be Ppam aided as required to increase future ambulatory prospects (BACPAR guidelines for pre and post amputation, 2006)
- A comprehensive programme of audit and re-audit to ensure to evaluate service and ensure best practice as recommended by NICE and BACPAR 2007

Cost Savings = £614,127

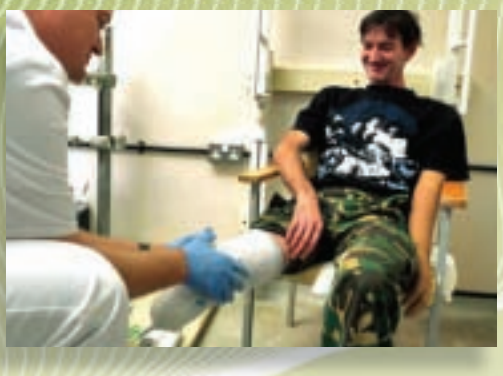
Opportunity Cost Savings calculated from pilot project

55 amputee patients p.a.
Pre-pilot amputee had average LOS 55 days
Pilot amputees average LOS = 23 days
Reduced LOS by 22 days
55 pts p.a. x 22 days saved = 1210 potential beds saved
Close 3 beds
If bed costs £35,000 x 3;= £105,000 per annum
Or use 3 beds for vascular in-patients
1210 / 7 (Av LOS for vascular pt) = 172 patients
172 x £4,058 (Av income) = £697,976 opportunity cost
Or use 3 beds for gen surgery & vascular patients
1210 / 4.6 (Av LOS for gen surgery & vascular pt) = 261 patient
261 x £2,355 (Av income) = £614,127 opportunity cost
This financial year we are expecting to decrease length of stay to fund 'overactivity', this will enable us to fund our therapy posts and contribute to some of the departments 'cost improvement plan'

medical illustration NHS HEART of ENGLAND NHS Foundation Trust

endolite

get busy living



celebrating 120 years of innovation

Blatchford 1890 2010 120 YEARS OF INNOVATION

2010 heralds the 120th year since Chas. A. Blatchford opened the doors of his first artificial limb workshop in London. It was the beginning of a family business that would see successive generations bring innovation after innovation to enhance the lives of the thousands of amputees they would encounter in the years up to today.

Blatchford is proud of this heritage and honoured by our ongoing relationship with amputees the world over, together we hope to continue this valued tradition.

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