UPDATE

BACPAR Exec roles up for re-election

BE INSPIRED

Life abroad as a Physiotherapist

LEARNING

Upcoming BACPAR Conference

BRITISH ASSOCIATION OF CHARTERED PHYSIOTHERAPISTS IN AMPUTEE REHABILITATION

AUTUMN 2018 **ISSUE 50**

The results are clear – charity worker sees incredible improvement with Ottobock C-Leg 4

Sarah Hughes lost her leg almost four years ago after battling soft tissue sarcoma, a rare form of cancer. Here she explains the story behind her amputation, discovering a new way of life through charity work, and how the Ottobock C-Leg 4 microprocessor knee has given her new hope for the future.

Sarah, of Whitchurch, Shropshire, was just 31 when her world was turned upside down due to the amputation of her leg. The ordeal began when, after three operations to try to fix ongoing issues, including her knee locking in position, she demanded a second opinion and a cancer diagnosis was revealed. Being a mum to her eight-year-old daughter and the deputy manager of a children's nursery, Sarah was worried about what impact the loss of her leg would have on her busy and active life.

Following her transfemoral amputation in July 2014, she received her first prosthesis, a basic mechanical knee. It was heavy and she wore a cosmesis to cover it. Despite this she enjoyed having the chance to walk around and spend time with her family, although she would usually use a stick for extra safety. By December 2014, she was driving again and felt she was starting to rebuild her life and regain her independence.

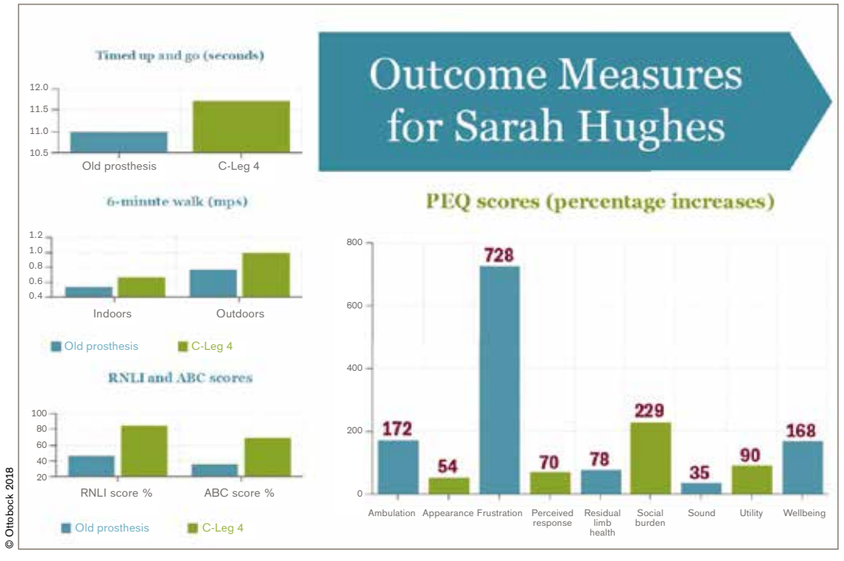
And while Sarah was unable to return to her career in childcare, her determined nature led her to soon pursue new opportunities, including returning to education to undertake a child psychology course and a learning difficulties course, volunteering at the Severn Hospice charity shop before becoming the deputy manager of The Headway Brain Injury Association charity shop in her local area. Having a purpose, and a team to run, helped Sarah continue to regain her confidence.

This year, through the limb clinic at the Royal Shrewsbury Hospital, Sarah's life changed again. Her prosthetist there gave her a chance to trial the Ottobock C-Leg 4, complete with its microprocessor technology. From her first steps, she felt the difference the C-Leg 4 gave to her gait and overall comfort.

She said: "I used to hip-hitch, and would regularly take painkillers before the C-Leg. Now I'm pain free and I'm far more confident when out and about. I used the escalator for the first time recently! It's still hard work, but life has been made a lot easier with the C-Leg."

The world is now Sarah's oyster and she's looking forward to a more mobile future – she and her family have been on a canal boat holiday and are all set for their annual family break to Pembrokeshire. She's also gone go-karting, attended a concert at Wembley Stadium and has signed up to learn skiing at an indoor ski centre in Manchester.

She added: "I have a hospital buddy, a mum my age who has a young son. We've become friends — I see her, and I message her weekly and I tell her that there is a way forward; I want to help people see what life can be like. And for anyone who is active or who wants to be more active, the C-Leg 4 is the way forward. It gives you so much independence, and I'd recommend it to everyone."



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WELCOME BACK

Julia Earle

BACPAR Chair

Clinical Specialist Physiotherapist in Amputee Rehabilitation

Gillingham DSC
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CHAIR MESSAGE

Let me start by thanking all those involved in setting up and running the fantastic May study day, those from BACPAR, OSSUR, all the speakers and especially Bob Gailey without whom we would have not even run the day. I'm sure all those that were there left inspired and full of plans for putting into practice what was learnt or been reminded of.

Since March I hope you have noticed a flurry of activity on the BACPAR – members only closed Facebook group – if you have not joined please do so as there are lots of interesting posts and it's the quickest way to get updates on conference etc. Please do get involved with this so we can make it interesting, relevant and share what's going on around the UK and beyond. We are still posting on iCSP and the website as well but this gets much less traffic so you are more likely to get responses, and much quicker, from the Facebook group.

On the iCSP/BACPAR website front I know there have been many teething problems since the changes, especially in searching for documents, but they do seem to be resolving now. We have been working with the CSP to iron out the wrinkles but in lieu of this we extended the early bird deadline for conference to the end of September as I know people were having difficulty finding the application form etc. Thank you as always to the organising committee this year (Sue Flute, Jess Withpetersen, Louise Tisdale and Carolyn Wilson) a really interesting programme is planned.

There are several exec posts up for grabs at the AGM – more info to follow in the journal. I would love to welcome new comers, and returners, to the committee. As always thank you so much to all those who serve on the exec committee and especially those standing down this year, its a privilege to work with so many dedicated, hardworking and enthusiastic people.

Thank you Jodie (and her husband Pascalis) for your last journal as editor, I look forward as always to reading it.

I hope to see many of you in November at conference and the AGM.
Julia Earle

FAIRWELL FOR NOW

EDITORIAL MESSAGE

Thank you all for your contributions, as you can see this is a small journal this time around due to the reduced number of submissions. Sharing our practice, audits and developments is key in improving services throughout the UK so please do look out for the journal deadline and submit your work, no matter how small.

You will notice in the BACPAR Bulletin section with the announcement of the Exec roles up for re-election that I hope to hand over the reigns after completing one term (6 journals). I have enjoyed completing these over the past 3 years and I hope you have enjoyed the new look. Looking back, my favourites have been: The Paralympic and the MPK Special Editions...so much in our field of practice to be proud of.

I have been extremely fortunate to have a computer literate husband working within the design industry who has more than helped create the journal using Adobe InDesign, Illustrator and Photoshop. To reassure anyone thinking of taking over this role, the production of this using these Adobe software packages is no longer needed. Due to the extent of man-hours needed to produce the journal, the Exec committee has agreed to pay for the journal to be put together by a format designer. Therefore the journal officer's future role will be to coordinate and liaise with the designer, advertisers and printers and proof read the journal. A much more doo-able task! This will help in continuing to build on the professional standard of the journal and with this the BACPAR brand.

I am more than happy to support with the Spring Edition with a full handover by Skype or face-to-face, and like Sue has been for me, I will be there for the next journal officer.

I would like to end by saying thank you to my husband Pascalis for designing the journal template that can be reused again and again. Without him I would not have been able to put my vision down on paper. He even created a high-resolution BACPAR logo from scratch because the original was a low quality version.

I will be taking a short break away from the Exec focusing on my MSc Dissertation and newly married life but I hope to come back in some other capacity in the near future. Please keep a look out for the survey i will be sending out via the exec for my Msc reserach project, your help will be much appreciated!
Keep up the fantastic work BACPAR!

Jodie

Jodie Spyrou

BACPAR Journal Officer

Advanced Amputee Rehabilitation Practitioner

Amputee Rehabilitation Unit
Guys & St Thomas NHS Foundation Trust

bacparjournal@gmail.com

95% of all photographs provided are unusable because they are pasted into Word documents or just too low resolution wise.

If you would like your photos added to your journal submission can you please provide them separately as JPEGs at the highest resolution possible.

BACPAR BULLETIN

POSTS UP FOR ELECTION AGM 2018

The following posts will be up for election at the AGM on 15th November.

If you are interested in any of the following posts and would like more information please email the current holders to find out more about what the post entails.

Being part of the exec is very rewarding and a great way of developing many skills within a very supportive environment. They really are a great team and there are all sorts of roles, some for those who just want to get started to those with a wider challenge. The good news is even in the more daunting roles the current holders of the post are willing to support the new holders for the first year – that's how lovely they all are! Please do seriously consider joining us.
Each post on the executive committee is for 3 years with a maximum of 2 terms of office in that role.

Executive meetings are usually held twice a year (March and September in Birmingham and London for the last few years) and as a committee member you will be expected to attend at least one of these to participate in the decision making process associated with the running of BACPAR.

Email Amy at **bacpar.secretary@gmail.com** with any nominations, and the name of a seconder, prior to the meeting where voting will take place. The nomination form can be found on the BACPAR website: **https://bacpar.csp.org.uk/content/bacpar-2018-conference-and-agm**

JOURNAL OFFICER

Currently Jodie Spyrou, end of first term but would like to stand down

- Organises the bi-annual journal
- Collating articles and photographs, ensuring photos are high quality jpeg files
- Ordering the content of journal
- Liaising with the Format Designer and handing over content and ordering of material etc
- Proof read
- Liaison with Advertisers
- Liaising with Printers – sending specification and journal file
- Liaison with BACPAR membership secretary for distribution list
- Liaison with BACPAR Treasurer informing of advertisements and rates for invoicing

Jodie Spyrou is happy to support the new Journal Officer for the next Journal due in March.
Email: **bacparjournal@gmail.com**

EDUCATION OFFICER

Currently Mary Jane Cole, end of second term

- Liaises with the externally provided post graduate training endorsed by BACPAR
- Updates the pre- registration Physiotherapy education guidelines every 3 years (this is due for update
- Works with other training providers in development and implementation of training material as appropriate such as Humanity and Inclusion and Physiopaedia

Mary Jane is happy to support the new appointee for the following year to hand over the role.
Email: **bacpar.education@gmail.com**

GUIDELINES CO-ORDINATOR

Currently Sara Smith, end of second term

- Oversees the production, endorsement and publication of BACPAR guidelines and review and update of the same as appropriate
- Co-ordinating, facilitating and chairing guideline update group meetings
- Disseminating roles, responsibilities and actions within the group
- Liaising with the CSP professional advisor

The Prosthetic Guidelines are currently being updated by the Guidelines Update Committee, so Sara is happy to continue in the role for a further year to see their production through as well, as to support and develop the new holder of the post, who would take over the lead in 2019.
Email: **sarah.smith2@stgeorges.nhs.uk**

RESEARCH OFFICER

Currently held by Chantel Ostler and Fiona Davie Smith, end of first term

- The overall role is to facilitate PN members in undertaking and utilising research to promote BACPAR's research activity and to liaise with the CSP and external research organisations on research issues.
- Providing research information
- Promoting latest research findings, advising PN members on research issues and directing them to research resources.
- Leading on the development and implementation of a research strategy for the PN
- Responding to research enquiries
- Advising and involvement in developing a research fund for the PN
- Facilitating networking with researchers
- Planning and involvement in events to disseminate research
- Maintains an up to date bibliography of relevant titles and holds a small library of articles and videos
- Requests members to contribute to BACPAR audit and research database

Chantel is happy to continue for another term in office, waiting to hear from Fiona!
Email: **bacpar.research@gmail.com**

ICSP FACILITATOR

Currently Rachel Malcolm, wishing to step down

This role is likely to be changing as moderation of iCSP is no longer needed with the recent online changes at CSP but the role will be more of a champion role – possibly including the social media aspect. Why not volunteer and help us shape the role.
Current responsibilities:

- To ensure that Amputee rehabilitation iCSP site is used effectively by the PN.
- Facilitates smooth running of the 'Amputee Rehabilitation' site, encouraging discussion and dissemination of related topics, and approves contributions to the site.
- Links iCSP and BACPAR executive committee

* Executive site moderated by BACPAR Chair and Secretary
* BACPAR website is moderated by the PRO and the Chair
Email: **bacpar.icspfacilitator@gmail.com**

NATIONAL AND REGIONAL

STUDY DAYS

PREDICT, MEASURE AND IMPROVE: MANAGEMENT OF EXPECTATIONS AND OPTIMISING OUTCOMES WITH BOB GAYLEY IN ASSOCIATION WITH OSSUR AND BACPAR

Carolyn Wilson
Belfast

Bob Gailey was someone that I had heard of (mostly from Laura Burgess) many times over my last 15 years spent working in the field of amputee rehabilitation. 'Sir Bob' is considered to be the guru of amputee rehabilitation and I had watched all his videos on line and read his books.

So, when Richard Hirons approached the BACPAR Exec on behalf of Ossur, to say that a possible visit was on the cards I, like many others, was excited at the prospect of seeing and hearing the great man in person. So the usual venue was booked and the date announced for the 21 May.

I am proud to say that I was the FIRST to submit my completed form and pay the bargain price of £35, however was deeply disappointed to learn that, according to Lou, this amazing feat did not earn me a bottle of champagne or even a complementary signed photo of Bob! I was however, given the prestigious job of 'official photographer for the journal', so I suppose I can console myself that the numerous photos of Bob on my phone are my reward! (Laura, I'm sure I could sell you some for a small fee.)

The great day dawned in an uncharacteristically sunny Wolverhampton and all of us 'groupies' gathered in anticipation and mounting excitement at the Science Park. Bob didn't disappoint.

He is indeed a larger than life character, full of personality yet self-deprecating, humble and approachable (not a bit like Bob's 'beloved' American President).

His first talk was on the value of Evidence-based Practice: Outcome Measures for Amputee Rehabilitation and Prosthetic Care. He covered a lot of ground in an hour and my brain was left reeling and needing coffee. It was a great review of the subject in which he highlighted those OMs that he considers to be the most relevant and robust.

The next session was titled "Global Outcome Measure use compared to the UK" by Lisan Scheepers, Carolyn Hirons & Bob Gailey. Carolyn Hirons from PACE rehabilitation shared her valuable insights and experiences using OMs within the private sector. Lisan discussed the prescription of MPK units and the role of OMs across Europe. Finally Bob discussed how the use of OMs has changed over the years, in the USA.

The next talk was an Update on the scoring tool to predict functional outcome in lower limb amputees - also known as the "BLARt" by Helen Naylor and Pip Russell from Leicester. Dr Fiona Davie-Smith and Joanne Hebenton next spoke on Transfemoral amputee screening for prosthetic fitting at WestMARC. This was followed by the morning panel session.

After lunch Bob spoke again on the Application of Outcome Measures for Assessment and Rehabilitation Prescription and gave a detailed, step by step description of the Amp Pro and how it can be used to determine the physical systems that need addressed in rehabilitation.

Following this we split up into groups for a series of workshops. Rachel Humperson and Lisa Scheepers led a group on, Functional Training for prosthetic progression, Gummi Olafsson and Jordan Creeny discussed the patient's perspective of the difference in prosthetic feet function, and Bob led a workshop on a practical demonstration of the Amputee Mobility Predictor Tool. The final talk of the day was by Chantel Ostler on her Research Proposal "Me-Amputee" Exploring meaningful outcomes of recovery for lower limb Amputees following Prosthetic rehabilitation: the patient's perspective.

The final session was a question and answer panel. Bob made an interesting comment during these discussions that, perhaps the way forward is for patients to take ownership of their own Outcome Measures. We all said our goodbyes and thank you to Bob and to the organising committee of Lou Tisdale, Rachel Humperson, Richard Hirons and Kat Atkin.

CLINICAL MANAGEMENT IN ACUTE AMPUTEE REHABILITATION COURSE

Megan Townsend
Senior Vascular and Amputee Physiotherapist
Band 6 Rotational Physiotherapist
Royal Free Hospital

The physical and psychological impact of having a lower limb amputated is a major, life changing experience. The physical (and mental) health issues arising from an amputation can create huge hurdles for well-being and recovery. Clinical management within the acute stages of the rehabilitation journey make a huge impact into functional and physical outcomes and people's quality of life. Catherine Wilkinson, senior occupational therapist for vascular and amputees, and Kate Conneally, the clinical lead and physiotherapist for vascular and amputee team, for the Royal Free Hospital, facilitated the BACPAR study day (27/04/2018). The 1-day course was presented to a variety of allied health care professionals with differing levels of experience with amputee rehab. It was a great way to share expertise and promote innovative and creative ideas to rehabilitation.

The day course began with each person introducing themselves, and a summary of what had brought them to the study day. The course brought a variety of allied healthcare professionals with a range of experiences working with amputees. Each attendee sharing their experiences of working with amputees at different stages of their journey across the UK.

The morning consisted of presentations on surgical interventions from consultant vascular surgeon Jason Constantinou. He educated us on the grisly history of amputations highlighting the changes and progressions made in the field. He discussed the different causes for amputations, how to optimise and prepare someone pre-operatively and potential complications post – op to look out for. Following on from this was the consultant podiatrist Richard Leigh with the "diabetic foot". This detailed the intense impact and risks that are associated with diabetes and the financial cost to the NHS. He spoke about the importance of foot care and looking after remaining limbs.

Kate Conneally and Catherine Wilkinson then talked us through the therapy involvement for amputees, both pre and post operatively. This was an in-depth and interactive discussion, getting into the details of early walking aids and exercise, falls prevention and encouragement of independence with ADLs. It invited open conversations about people's experiences and highlighted the movement of health promotion within the NHS.

Following a lunch break there was opportunities to chat to established amputees. It was a great chance to better understand the patient experience of rehabilitation. This was a fantastic opportunity to talk with people who had undergone this life changing journey, and emphasized the importance of patient centred practice. The afternoon saw practical sessions. Tailored for PT and OT, and were kindly aided by the established amputee. The stations consisted of:

- PPAM Aid (led by Livia Fornasari)
- Femurett (led by Megan Townsend)
- Exercise Prescription (led by Kate Conneally)
- Patient transfers & wheelchairs (led by Rebecca Eldridge)
- Function in hospital and at home (led by Catherine Wilkinson).

The study day was, overall, an insightful and thought-provoking day. The nature of the discussions stimulated some great ideas and creative problem solving. It was a great way to share experience and understanding in such an exciting area of our profession.

STORYTELLING CENTRE, EDINBURGH – 8TH JUNE 2018

SPARG NATIONAL CONFERENCE

Helen Scott
SPARG Chairman

This was the third biannual SPARG conference. It was held for the first time in the very beautiful city of Edinburgh which I was able to enjoy as a tourist thanks to Mary Jane putting me up for the 2 nights. It was organised by SPARG members from the 'East', led by Catriona Mawdsley.

54 people (physiotherapists, OTs, Nurses, Rehab Medicine doctors, prosthetic students) attended the day, hailing mainly from Scotland but some had travelled from further afield including Belfast, Essex, Newcastle, Exeter, London and even Portugal.

The conference exhibition was supported by 'Finding Your Feet', Ossur, Ottobock, RSL Steeper, OrthoEurope, Juzo and Blatchfords and the chat with the reps was extremely useful and the 'freebies' appreciated.

Russel Jamieson, Consultant Vascular Surgeon started the day with an informative review of considerations for transfemoral amputation (TFA). Of note to me were the following points:

- survival after TFA is worse than colon cancer, ovarian cancer and leukaemia at 2.5-3.5 years.
- the type of anaesthetic used has no affect on mortality
- predicting healing after amputation using transcutaneous oxygen pressure measurements has low reliability, the absence of a femoral and/ or a profunda pulse is better
- perineural wound catheter should be used for postoperative pain relief as it is associated with reduced use of opioids and earlier mobility although it does not reduce phantom limb pain or mortality
- Vac dressings should be used for 5 days undisturbed

His talk prompted interesting discussion including why myodesis cannot be used routinely in presence of PAD due to increase length of surgery time and poor state of bone to drill into.

Louise Whitehead presented the results of a small comparative study investigating outcomes of a consecutive cohort of unilateral TFAs at 2 centres. It appeared that in both centres only 14% of patients were using their prostheses at one year from being fitted but the centre with intensive inpatient rehabilitation was associated with increased time wearing the limb compared to the outpatient rehabilitation service. The talk prompted discussion around what is the best model of care and the need to consider patient experience and their preference when deciding this. This then lead into a lively discussion about limb abandonment, why this happens and whether it is avoidable.

Mary Duguid, Specialist OT talked about the development of a pre-amputation home visit service that was set up to reduce length of hospital stay. Mary had aimed to do this for 50% of all new amputees but only achieved it with 16%. Unfortunately, initial results have shown no change in LOS probably due to the small numbers. Wee Lam, Consultant Plastic Surgeon then presented on a small series of 7 patients with whom he had used fat injections to improve socket comfort score in the presence of bony prominence or neuroma. Initial results look promising with all patients reporting significantly improved socket comfort. Complications have been fat re-absorption (n=3) and fat necrosis (n=1).

The last talk before lunch was by the very entertaining Paddy Gibson, Consultant Renal Physician. He explained why renal failure causes amputation, how most dialysis services can be flexible regarding dialysis days if they clash with amputee rehabilitation days, successful transplant surgery requires good pelvic vessels and why poor access for fistula formation is associated with a poor prognosis. He also talked compassionately about the conflict between quality of life versus 'heroic surgery' and length of life. He advocates a frank discussion with patients when they present with an ischaemic foot, if they have no access for fistula formation and are not for transplant. He offers patients '3 weeks of peace' by withdrawing dialysis versus '3 months of hell with an amputation'. If patients do have amputation and are proceeding with rehabilitation he recommends that the renal team are approached to optimise these patients renal status (anaemia, blood pressure and fluid state).

I enjoyed case presentations on patients provided with multiarticulating upper limb prostheses and another on use of the Kenevo MPK with a multitrauma patient. It was interesting to see how much the Kenevo assisted with sit to stand. Fiona Davie Smith's excellent presentation on amputation and social deprivation prompted an interesting debate on how we improve outcomes after amputation and whether early and increased rehabilitation in the community is the answer.

Finishing the day was Rebecca Beltran, Specialist OT talking about the Driving Assessment Service. It was interesting to hear about the process that our patients go though. She clarified the following points: -

- Patients are told the outcome on the day
- A letter is sent to the GP
- A letter is only sent to DVLA if they have made the initial referral
- GP can advise patients to stop driving without a driving assessment being carried out and the GP will ask patient to surrender their licence
- DVLA website has guidance

All presentations can be found on the SPARG website: **www.knowledge.scot.nhs.uk/sparg.aspx**

A day away from work to listen, reflect and discuss is always useful. To do it on a lovely sunny day in Edinburgh with colleagues and friends was an added bonus (as was the wine in the bar after). I am looking forward to the next one in June 2020.

Sarah German
Specialist Physiotherapist

Previously having worked in amputee prosthetic rehabilitation and looking to return to the specialty I subscribed to the day course to maintain and update my knowledge. The conference was well attended with mainly Scottish physiotherapists and took place in the heart of the city. Presentations included advances in transfemoral amputation surgical techniques; a study into prosthetic limb use: 1 year follow up of patients with transfemoral amputations; occupational therapy assessment and in-reach services to improve patient journeys and improve discharge planning; upper limb prosthetic use; a moving case study of a polytrauma amputee; a PhD study into the link between social deprivation and amputations; and renal disease and amputee rehabilitation.

To have such a range of experienced, knowledgeable and passionate speakers including consultants, physiotherapists, occupational therapists and prosthetists provided a well rounded day into the different facets of the care of the amputee patient. It was also a helpful reminder of the need for us as physiotherapists to consider the complex multifactoral needs of our amputee patient which must be addressed holistically through the MDT in order to provide high standards of care.

Following each presentation we had time for questions and discussion which facilitated many stimulating and interesting conversations. One particular interesting discussion surrounded our role as amputee physiotherapists in reducing morbidity and improving quality of life for our patients who are elderly and frail with peripheral vascular disease. Within this discussion we thought about both promoting prosthetic use to improve function and wellbeing whilst also considering how to manage those patients for whom wheelchair use may be a more realistic option to facilitate improved function and independence.

I would thoroughly recommend BACPAR members look out for the next SPARG conference and consider attending.

PINBOARD

UPCOMING AMPUTEE CPD EVENTS

I ♥ BACPAR

BACPAR

BACPAR 2018 Conference and AGM

The 2018 Conference and AGM will be held in Wolverhampton following review of the 2017 Conference feedback.
The conference date is 15th and 16th November 2018

09:00	**Chair welcome**
09:15	**The Effect of cancer treatments on exercise ability/and effects of exercise during cancer treatments** – Amanda Thomas
10:00	**Frailty** – Elizabeth King
10:30	**Coffee**
11:00	**Evidence behind exercise in later life** – Simon Hanna
11:30	**"Does it hurt to try /" – a psychological perspective on trying and being unsuccessful with a prosthesis** – Dr Suzanne Carson
12:00	**AGM**
12:45	**Lunch**
13:45	**Chronic Regional Pain** – Danni Pennacchia and Paula Wilkinson
15:00	**Coffee**
15:30	**GROUP 1: Early amputee rehabilitation exercise** – Anna Cue / Sue Flute
15:30	**GROUP 2: MPK: Facilitated discussion based on the Westmarc guide** – Helen Scott

09:00	**Welcome**
09:15	**Basic Amputee Mobility / Outcome measures** – Morten Kristensen
10:00	**Social Media**
10:30	**Coffee**
11:00	**Health Coaching** – Trudi Dunn
11:30	**So your patient has a mental health diagnosis** – Caroline Griffiths
11:45	**Specialist Prosthetics Services in Scotland** – Fiona Davie Smith
12:20	**Guidelines** – Sara Smith
12:30	**Lunch**
13:30	**Sarcomas a Surgeons Perspective** – Mr Michael Parry
14:00	**Paediatric amputation and limb fitting post sarcoma** – Abu Sidhanee/Charlotte Betteridge
14:30	**Rotationplasty – A Case Study** – Louise Whitehead
15:00	**Comfort break or Coffee**
15:15	**Bikini sockets vs full socket what are the advantages for physiotherapists?** – Helen Scott and Lou Tisdale
16:00	**Questions**
16:15	Close

For information about sponsorship opportunities of the Conference please contact **Carolyn** at the following email **bacpar.irelandrep@gmail.com**

BACPAR

AUDIT REMINDER

Please remember to send a summary of any audits you do against the new BACPAR guidelines to Sara Smith – Guidelines Co-ordinator:
sarah.smith2@stgeorges.nhs.uk

https://bacpar.csp.org.uk/

The conference programme will comprise a series of keynote and guest lectures, free paper presentations, poster exhibition and workshops. And as is customary at ISPO meetings, a commercial exhibition will run in tandem with the meeting offering delegates an opportunity to see the latest innovations in rehabilitation engineering and assistive technologies.

Combined with a lively social programme, sponsored by our exhibitors, TIPS/ISPO/BACPAR2019 promises to be a truly inspirational event for all professionals involved in rehabilitation medicine, research, practice, prosthetics, orthotics, engineering, physiotherapy, occupational therapy, neuroscience, assistive devices and technologies.

SPARG ANNUAL REPORT

A SURVEY OF THE LOWER LIMB AMPUTEE POPULATION IN SCOTLAND 2015

Dr F Davie-Smith
SPARG Research Officer
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Ms J Hebenton
SPARG Executive Committee Chair
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Ms H Scott
SPARG Chairman
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EXECUTIVE SUMMARY

This is the 23rd Annual Report on data collated from all major lower limb amputations in Scotland by the Scottish Physiotherapy Amputee Research Group (SPARG). All major amputations carried out in 2015 are included, that is, ankle disarticulation (AD), transtibial (TTA), knee disarticulation (KDA), transfemoral (TFA), hip disarticulation (HD), and transpelvic (TP). Patients having partial amputations of the feet and amputation of the toes are excluded. Amputations at the knee disarticulation (through knee) level are reported within the transfemoral amputation numbers due to their similar rehabilitation needs.

All data are entered locally onto the SPARG web-based Database. The Database has reporting facilities which allow for local data checking and analysis.

National and individual hospital data are presented in this report. All outcomes are reported according to final level of amputation. Individual hospital data are summarised to facilitate comparison of outcomes and the benchmarking of services. The comparative data items or key performance indicators (KPIs) for each hospital were identified by a previous, multidisciplinary benchmarking exercise (Scott and Patel 2009). For the first time, the length of rehabilitation is reported in two parts for each centre. Firstly, the overall length of stay in the hospital setting and secondly, the overall rehabilitation period in the out-patient setting. Each of the larger centres' (n≥10) models of care have been described according to criteria identified in the benchmarking report and agreed following consultation with SPARG members.

National demographic data appear to be similar to 2014; any changes and trends are noted below. Where possible, comparisons are given in the body of the report for at least 6 years from 2010-2015. Due to restrictions on data governance there are no descriptions of those patients who underwent an amputation in the Grampian region, though the final number of amputees and amputations does include them.

Results

In 2015, there were 802 amputees and 835 amputation procedures; some patients having had a re-amputation (to a higher level), or bilateral amputations during the same episode of care. However, due to Grampian patients being excluded (n=93) and 5 missing data sets this report will discuss results in reference to 704 amputees and 737 amputations.

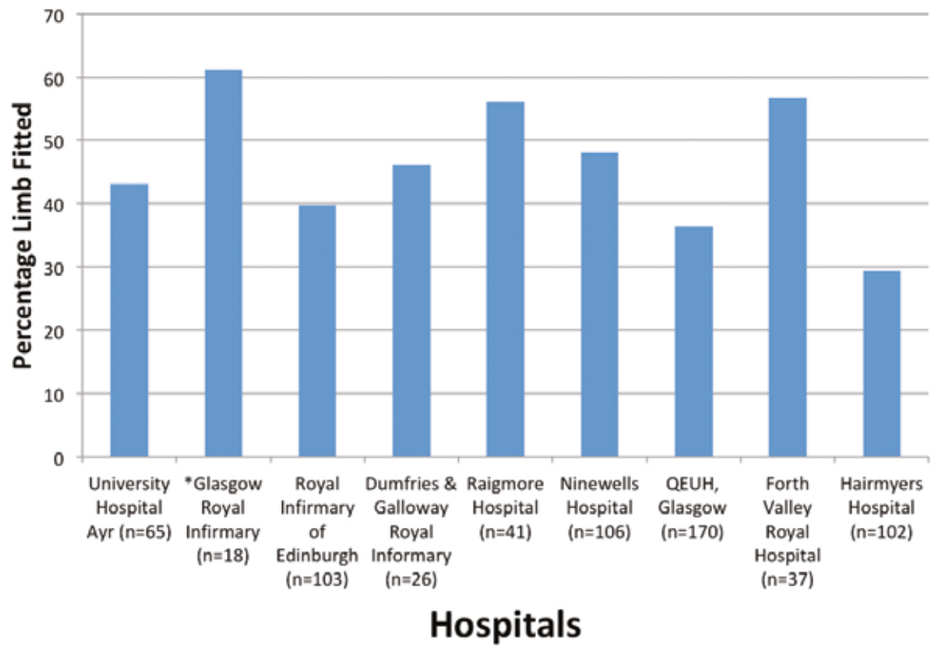
The quality management "data checking" system introduced in 2003 continues to be highly successful. The percentage of returned records which are complete in every respect is 97.2%.

The median age in 2015 was 68 years at time of amputation, which is slightly higher than 2014 (67 years). The population were 66.5% males and 33.5% females. Peripheral arterial disease (PAD) in the presence or absence of diabetes accounted for 85.4% of all amputations in this population.

The proportion of patients with diabetes was lower this year, 44.7%, and the age difference was larger. The mean age of the group with diabetes were 5 years younger than those with amputation due to PAD (without diabetes). There were almost three times the numbers of men in this group (male to female ratio, 2.6:1 compared to 1.6:1 in those with PAD).

The percentage of amputations carried out at a transtibial (TTA) level in 2015 was 51.2%, however individual hospital data (centres, n≥10) show significant variation, from 25% to 72.2%.

The proportion of patients (all levels) fitted with a prosthesis is 41.6%. When examined by level, 68.0% of TTA and 23.9% of transfemoral (TFA) were fitted. There is still discrepancy between genders, with more men than women being fitted with a prosthesis (TTA, M=71.14% & F= 56.52%) (TFA, M=29.34% & F=17.54%). When individual hospital data are examined, the differences in proportions of patients being successfully fitted are large, varying from 29.4% to 61.1% (centres, n≥10) (Figure 1).



*No amputations for PAD (+/-DM)

Figure 1 **Percentage of patients who were limb fitted in each of the hospitals (n>10)**
(Total number of patients with lower limb amputations at each hospital is shown in brackets)

For the tenth year, the figures for prosthetic rehabilitation being abandoned during the rehabilitation period are reported (9.6% of all patients (n=32)). These were unilateral TTA=7.1% (n=13), unilateral TFA 21.7% (n=15) and bilateral 11.1% (n=4). Inpatient length of stay (LoS) for TFA has risen to 48 days for limb fitted and 42 days for non limb fitted.

Discussion and conclusions

Service changes in 2015

The Queen Elizabeth University Hospital opened in May 2015 and the centralised vascular unit from the Western Infirmary moved into the new hospital.

Limitations of SPARG data set: -

1. Reporting of aetiology

SPARG reports diabetes as the underlying aetiology in all cases in which diabetes is an established diagnosis, unless the reason for amputation is tumour, trauma, burns or an orthopaedic condition.

2. Factors not currently accounted for in data analysis: -

- Pre-amputation vascular reconstructive surgery.
- Incidence of palliative amputations, that is, life-improving surgery for patients who were previously and, in the long-term, immobile with no prospect of rehabilitation.
- Social deprivation.
- Final outcome at a defined point in time after surgery and longer term follow up.

Key messages from the 2015 report are: -

1. The median age of the cohort of amputees in Scotland in 1996 when compared to 2015 differs by one year; however there were more amputees in the 60-80 years age range in 1996 compared to 2015 where there were more patients under 60 and over 80; overall there were 50 more patients in 2015.

2. There is a continued reduction in the use of rigid post-operative dressings for those with a TTA: 20% in 2014, 18% in 2015.

3. Outcomes and milestones continue to vary significantly between hospitals, most importantly, the proportion of amputations carried out at a TTA level and the proportion of all patients successfully limb fitted.

4. Proportionally, fewer females continue to be limb fitted compared to males and this varies between hospitals.

5. Median inpatient length of stay for TFA has risen by 13 days for those who were limb fitted and 11 days for those not limb fitted.

6. There was an increase in amputation due to Intra venous drug abuse (IVDA) and a reduction due to orthopaedic conditions in 2015.

7. Only 22% of TFA had compression therapy commenced within 10 days of amputation, a reduction from 58% in 2011.

8. Cast to delivery times remain varied from centre to centre (1-17.5 days).

9. More people with a bilateral TTA are limb fitted (67%) compared to those with a unilateral TFA (24%).

10. Limb fitted patients with bilateral TTA report a lower mobility change score (LCI-5= -7.5) indicative of an improved recovery compared to those with a unilateral TFA (LCI-5=-18).

11. Bilateral TTAs were younger than those with a unilateral TFA, and more are limb fitted and have diabetes.

12. There was an eight year age difference between those with a bilateral TTA (60 years) compared to those with either a bilateral TFA or a combination of TFA and TTA (68 years).

13. The models of care are varied in Scotland with some having only in-patient prosthetic rehabilitation and others with out-patient prosthetic rehabilitation. Therefore there is great variation in length of stay and as such these models of care do not necessarily indicate the final outcome achieved at the end of rehabilitation.

Points for further investigation/action: -

- The large variation in the proportion of amputees successfully limb fitted between centres continues to warrant further investigation by the local multidisciplinary teams.
- Reporting of aetiology has been revised to include more detail for people with diabetes and amputation for orthopaedic reasons (see Appendix D). This was implemented from 1.1.2016 and will enable clearer reporting of the immediate indication for amputation in the next report.
- Key aspects of services that appear to improve speed and outcomes of rehabilitation after lower limb amputation, in particular, impact on limb fitting outcomes of inpatient rehabilitation and reasons for variations in prosthetic fabrication times between centres.
- Reducing median age and increasing proportion of people with diabetes and amputation.
- Increase in drug abuse as reason for amputation.
- Poorer outcome for females and the variation in this between centres.
- KPI data according to Health Boards in addition to amputating hospitals.
- Reducing use of rigid dressings.
- Impact of standard sizes for TFA shrinker socks on time to starting compression therapy.
- Impact of change in pre-prosthetic assessment on the rate of abandonment for TFA.
- Report limb fitting outcome by aetiology.

The full report can be accessed from the SPARG website (SPARG website: **http://www.knowledge.scot.nhs.uk/sparg.aspx**) or from the authors.

LIFE ABROAD AS A PHYSIOTHERAPIST

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As we all know starting a new job presents its own difficulties however working in a foreign country such as Malawi brings its own very different demands. Normally in the UK you wouldn't think if your patients could afford shoes and underwear, in Malawi, however, backup of both is in the store room nestled between the prosthetic feet and knees.

Who knew that trying to arrange a meeting with the Malawi Ministry Of Health two weeks in advance is actually too far in advance – they are much more laid back and relaxed.

These are just a few of the challenges I experienced when I was lucky enough to have the opportunity to live and work in Malawi for 18 months.

As part of my work I organised a two day outreach program in Kasungu (a rural village in west of Malawi), where I explained to the community how to recognise if a friend/relative would benefit from a prosthetic or orthotic. It all went very smoothly and was a great success.

Later on the first day when evening arrived my colleague turned to me and said "we need to find somewhere for you to stay overnight where your car is safe".

"Car is safe?" I asked naively "will they try and take my radio", No came the reply;

"Will they take my tyres?" No was the reply again;

"Will they break in to see if there is money?" No, my exasperated colleague repeated "Your car" "They will take your car and they will drive to the Zambia border".

So that night I stayed in a £4 room with no electricity, no water, plenty of cockroaches, and a door so pathetic even I could break it down. Needless to say sleep was limited but hey at least my car was safe.

The second programme which was three weeks later was also very successful resulting in a very good attendance. This time, however, I opted to drive there and back each day – a 6 hour round trip.

Outreach teaching session to village health volunteers.

On another visit to a village we stopped for lunch, I walked over to the tea room where the only option was chicken soup and bread which was fantastic, as I hadn't had chicken soup since leaving the UK eight months ago. I pointed to what everyone else was having and the lady serving looked at me oddly, as if to say "are you sure". I just nodded encouragingly and sat myself down. The lady then picked up a cup and put in three spoons of sugar, two spoons of powdered milk, then poured boiling water through a strainer filled with old tea leaves that looked like they had been there at least a few days (at least I hope they were only a few days, rather than weeks!). Not quite the chicken soup I had envisioned, but warm at least, just what was needed in the heat.

Then there are the physio challenges. - discussing with an elderly bilateral transfemoral that he would not be safe with two prosthesis, especially given the poor state of the ground in Malawi which is a mix of dust, sand and tarmac roads which have a curb drop off at least a foot. After a long conversation it transpired that actually he wanted a hand propelled wheelchair. Different to the UK where patients would prefer electric wheelchairs.

Other challenges vary so much from the UK, you see many conditions that we don't have, for example, polio and leprosy. The local staff I worked alongside really came into their own and were great at working out what orthotic devices would best help these patients. You also see the patients who, without education and intervention, have been left after injury with life changing and secondary complications. We saw a teenage boy who had burnt the front of his ankle as a young boy, unfortunately with no intervention or education his foot now merged into his tibia. Regrettably with cases like these we were unable to help and even worse there are not the appropriate resources in Malawi to refer him to.

With other patients the physio was best kept simple. I saw a 10 year old transfemoral patient who walked with: a lateral trunk bend, uneven step lengths, circumduction, and in standing she had a lumbar lordosis and scoliosis. The Prosthetists had been working with this girl for a few years and had been unable to help her gain a better gait pattern. Back to the basics - the assessment in lying showed no scoliosis and thomas test showed a 30 degree fixed flexion. After the P&O's added flexion into the socket we reassessed the girl in standing which showed a leg length discrepancy of 5cm, which the P&Os then corrected. Although her gait wasn't dramatically improved by the changes made, secondary problems would be prevented. I was able to show and explain the basic assessment to all the P&Os who will now use this knowledge to benefit future patients.

Overall I found physio abroad, well certainly Malawi, is best kept like the transfermoral suspension system - the KISS system. Living and working in Malawi was both amazing and rewarding. The experience taught me so much and I was also able to share my knowledge with the staff and patients. I have always wanted to work abroad in a humanitarian setting and after specializing in amputees, going on short trips to Ukraine and Cambodia working as a physio, I felt ready to take the plunge and leave my NHS job for a longer term overseas position. A decision I do not regret.

THE LACK OF PHYSICAL ACTIVITY IN LOWER LIMB AMPUTEES

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Adults in the UK are becoming more inactive (Public Health England [PHE] 2017). It has been found that 39% of adults in the UK fail to achieve recommended levels of physical activity (PA) or exercise (British Heart Foundation 2017).

A lack of PA is one of the reasons for the rise in obesity and Type 2 diabetes [T2DM] (Hu et al 2007; PHE 2016). In 2015 27% of the UK's population were obese (NHS Digital 2017), and it is estimated that more than 35% of the population could be obese by 2030 (Organisation for Economic Co-operation and Development 2017).

The Scale of the Problem with Amputees

People with lower limb amputations are more inactive than their non-disabled peers and not participating in enough physical activity to derive health benefits (Deans et al 2012; Littman et al 2014). Langford et al (2018) found that 61% of their participants were not sufficiently active and 33% were classed as sedentary. The high levels of inactivity is leading to high levels of weight problems, 81% were overweight or obese in Rosenberg et al (2013) study.

The Importance of Exercise for Amputees

Low levels of PA for amputees present great risk in terms of future health complications and death (Paxton et al 2016). It has been found that there is no single intervention with greater efficacy than physical exercise to reduce the risk of virtually all chronic diseases including cardiovascular (CV), stroke, T2DM and reducing the risk of mortality (Booth et al 2000; Kelly et al 2014; Xie et al 2017). A lack of fitness is predictive of not being ambulatory post amputation (Kahle et al 2016; Chopra et al 2017). Hamamura et al (2009) found that amputees who were ambulatory had a significantly higher VO2 max compared with those who were not.

Physical activity can have a positive effect on amputee's mental health. Laferrier et al (2015) found that participation in exercise and sports has a positive influence on self-esteem and quality of life [QoL] and Wetterhahn et al (2002) found it can reinforce a positive body image, improve mood and decrease stress.

With the knowledge that PA can improve physical health, improve long-term outcomes, reduce functional impairments, improve QoL and mental health, it is imperative that development of regular PA habits should be encouraged and emphasised in the amputee population (Crawford et al 2016). Therefore training in prosthetic walking should be accompanied by endurance training with the aim of improving fitness of amputees (Versting et al 2005).

Current Practice

There are no nationally held statistics or common outcome measures completed to guide practice or to be able to evaluate whether cardiorespiratory function is assessed or improved in prosthetic rehabilitation in the UK.

Miller et al (2017) state that traditional amputee rehabilitation tends to focus on physical impairments at the current time and neglect physical activity behaviours that may exist prior to their amputation. This approach tends to neglect chronic physical inactivity and history of poor health self -management which can contribute to poor functional outcome after amputation (Christiansen et al 2015).

In summary there are currently two main challenges: to embed endurance training in the early post-op therapy phase and then engaging amputees to long term physical activity.

Barriers to Amputees Exercising

Encouragement of therapists to increase the amount of endurance training in the post-operative stage involves education and change of practice but reasons for reduced sustained PA in amputees are varied and complex (Rimmer et al 2004; Junker and Carlberg 2011; Twillert et al 2014). Physical issues restrict amputees but also psychological reasons can be profound, and practical aspects restrictive (Rimmer et al 2004; Crawford et al 2016). Applying the biopsychosocial model (Engel 1977) would be appropriate way to assess amputees barriers to PA. Please see figure 1 for an overview of these barriers and how they fit into the model.

Figure 1: Reasons for lack of PA in amputees using the biopsychosocial model

It is beyond the size of this BACPAR article to detail all these barriers, so contact the author if you would like to discuss in more detail.

Clearly there is not a simple solution to improving PA in amputees. Amputees present with a diverse range of physical and psychological barriers. An attempt has been made to suggest solutions to these barriers within the psychosocial model presented previously (Engel 1977), please see fig 2.

Figure 2: Possible solutions to improve PA in amputees using the biopsychosocial model.

It is beyond the scope of this essay to discuss all possible solutions. It will therefore concentrate on some solutions that could come from governmental level as well as suggestions for healthcare professionals.

NHS England is moving to a tariff based system for payment of prosthetic services. They have a responsibility to monitor service provision and require outcome measures to be taken by each prosthetic centre. If they request a measure that records PA or cardiorespiratory fitness then there will be a focus to not only measure this but also to improve it. This could lead onto a national record of PA within the amputee population that can be used for further research to improve PA outcomes. The challenge that could lead to an innovation in improving PA is what measure to use. The six-minute walk test has been used previously and is validated for use in amputees (Raya et al 2010).

It does not show activity over time and therefore appropriateness can be questioned. Self reported PA could be used but people are inaccurate at measuring their levels, therefore the most accurate and reliable measure would be activity monitors that can be attached to a prosthetic limb (Stepien et al 2007).

They are controversial due to consent issues but some microprocessor knees already have them integrated. If the monitors were coupled with a national database then a huge body of information would be gathered. This can be analysed to look at trends between amputee levels, age etc., over time to see if PA is increasing. This can be used nationally to inform direction of resources/ implementation of projects in particularly poor performing areas. The government is fully aware of the physical, psychological and social benefits of PA and is specifically targeting physical inactive groups, including people with disabilities (Department of Health [DoH] 2015). Using the PA database will assist them to facilitate the local partnerships they are keen to build at local level (DoH 2015).

Taking into account the biopsychosocial model they can work to minimise as many as barriers as possible. A good example is the user led amputee exercise group in Manchester called MANFIT. This has struggled at times to sustain itself due to costs. If the government could support such groups then it gives amputees a very useful resource. They can be based in an accessible gym, exercising with other amputees minimises body image problems and creates a supportive and social environment. Deans et al (2008) strongly advise increasing PA as long as social interaction is not compromised. If transport costs could also be reduced then many of the barriers to exercise could be removed. The costs of the project could well be potentially negligible over time if it leads to increased PA and therefore less co-morbidity health costs.

Health professionals are key to improving PA in amputees. They have first contact and regularly see them throughout their rehabilitation. The difficulty they have is lack of time and limited sport and exercise resources within rehab (Williams et al 2017). There are things that can be implemented. There should be a change of emphasis in early rehabilitation to a dual focus: improving walking ability and improving PA. Endurance type exercises should be used alongside functional rehabilitation to not only improve amputee fitness but also help overcome their fears and anxieties about exercise and therefore promote adherence to regular PA (Deans et al 2012). Using the biopsychosocial model will assist them to define which barrier is the most important for that individual to overcome and work with them to do so. Integrated into this should be self-management education.

Amputees would benefit from knowledge about how to adjust exercise to meet their needs and how to manage their prosthesis/residual limb during exercise (Williams et al 2017). The setting up of separate regular exercise sessions for amputees during their rehabilitation should be encouraged to develop PA habits. As discussed previously amputees prefer exercising with others, and the importance of peer support shouldn't be underestimated (Littman et al 2014).

There is growing evidence that if possible people who are undergoing an operation should undergo cardiorespiratory training to improve post-operation outcomes (Weston et al 2016). If started pre-operatively then it can improve the success of rehabilitation afterwards, not only physically but also as it can improve self-esteem and self-efficacy which is equally as important (Deans et al 2008; Miller et al 2018).

The difficulty with completing pre-operative exercise, and one that is also a factor in the lack of PA post-operatively, is having enough time to exercise. Recent research is finding that short bouts of high intensity training (HIT) are more effective than moderate aerobic training at improving fitness (Tjonna et al 2009). Ruffino et al (2017) devised a similar programme for people with T2DM in an effort to make it even more effective and time efficient. Their programme 'reduced-exertion HIT (REHIT)' was found to improve VO2 max more than a moderate intensity intervention.

This intervention had a time-commitment 80% lower than for the moderate intervention (30 min per week vs 150 min per week) (Ruffino et al 2017). These types of exercises have been used on high-risk cardiac patients (Xie et al 2017) but further research needs to be completed to ensure that the high intensity is safe for the majority of the population. With this consideration they maybe more appropriate and most useful when there is therapist supervision, i.e. in the pre-operative phase or the exercise group in rehabilitation. Time pressure is greatest at these points so an excellent way of integrating endurance training early on to gain the physical and psychological advantages of it and reduce the amputees anxiety about exercising in the future.

Conclusion

PA is extremely important for a number of physical and psychological gains. Not enough lower limb amputees complete a sufficient amount of PA for a variety of biological, psychological and social reasons. There is a paucity of quality literature relating amputees and exercise but therapists are key to enable and promote PA. Through a holistic assessment they can provide an individualised programme to overcome any barriers. By embedding cardiorespiratory training in the pre-operative and early post-operative phase amputees can start gaining the benefits and improve their confidence to continue with PA beyond discharge. The government has a focus to improve inactivity in the disabled population. By investment in activity monitors, working with local amputee groups and reducing financial barriers to exercise then they may start to achieve this.

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SEPTEMBER 9TH 2018

SACM EXPERIENCE OF GO TRI EVENT

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Several months ago, during a meeting with Poli and Andy of Limb Power it was asked whether the Specialised Ability Centre Manchester would be able to recruit a team of about twenty to take part in a triathlon. The team would consist of a mixture of patients and staff. Each of the team members would have different abilities and sporting experience but would all be able to contribute equally to the event.

The event was scheduled for September at Total Fitness Leisure in Wilmslow, which left willing volunteers three months to prepare. There were 2 events. The first consisted of a 100m swim, a 6.8km cycle followed by a 1.5km walk. The second option was for a 200 metre swim, with a 10.75km bike ride and finishing with a 2.75km run or walk. We like a challenge at the Specialised Ability Centre, so the race was on to try and recruit willing (or convincible) participants to sign up with just the 3 short months to go before the big day.

There was endless enthusiasm by the staff and the word quickly spread throughout the centre that we needed to recruit members to the team. There was a lot of interest, but even more questions;
Do I need to be prosthetic to participate?
Do I need to be fit?
How do we get there?
Where will we get changed?
Where do we get a bike from? Is the bike/run section flat and What if there are problems with my leg are to name but a few. Fortunately, a common question was how do we sign up?

Thanks to the dedication of the staff, there were answers as there was regular communication with the Go Tri event company organiser, Andy McAnally. He was able to give his advice on the best way to run an event and the staff were able to offer their support in making suggestions appropriate for the participants as this would be his first event for all ability athletes.

We contacted an incredible non profit making charity – Simply cycling. Simply cycling offer cycling opportunities for anybody of any shape, size or ability at three locations throughout the week. Some of the team went to one of their sessions to try a selection of foot and hand bikes in order to be able to assist patients of the centre with the best choice. We spoke to all of the patient participants and advised them to try and visit a Simply Cycling session prior to the event to select a bike that was appropriate for them.

Simply Cycling very kindly agreed to join us on this event to provide and transport all of the bikes that would be needed on the day and would meet us on the start line. This meant that our cycling issues were now resolved.

The swim section caused most concerns, mainly around changing facilities. In a standard triathlon you can cycle and run wearing your wet swim gear. This wasn't an option for our team if we were to avoid an overloaded nursing clinic on Monday morning. There were multiple emails with the event organiser to ensure proper changing facilities would be available before, during and after the event.

Not all of our team wanted to do the swim section. As we wanted it to be an all inclusive event, it required further negotiation with Go Tri. It was decided that we could do the event in teams and that everybody could do which ever sections they felt comfortable with. This lead to further concerns by the event organiser as to how we were going to time everybody. Timing was at the very bottom of our list of priorities. Our aim was participation and to get everyone across the finish line.

The final team consisted of 8 patients with a full range of ability and progression through the prosthetic phases and 5 staff – yes we were short of the target 20 but with another couple of phone calls and text messages, half of the Carrington Pigs Rugby team were persuaded to join us with a promise of beer at the end. Race day arrived – excitement and nerves were radiating through the WhatsApp and Instagram groups. We were all here, instructions given and off to the poolside for the first discipline.

We had arranged that everyone in our team would go in the first wave of swimmers. Our bilateral athletes were in lane one next to the pool edge with the remaining unilateral swimmers in lane 2. The staff were then spread across the 4 lanes to fill in the gaps.
To say this section was emotional was an understatement. There were some very competent swimmers and others that mentioned prior to the event that they had concerns regarding their ability. The encouragement from all the other competitors was overwhelming. Every single person in the swimming area was behind our team supporting them through every stroke of the swim. The team did not disappoint and everyone completed the swim under their own steam.

A little help was required to get some athletes out of the pool and into wheelchairs but this only heightened the fact that it was a complete team effort as everyone played their part. It was back to the changing rooms ready for the dry section. Bikes had already been allocated and racked in the transition area prior to the start so it made the process straightforward, and with that the team pedalled around leafy Cheshire with a variety of bikes from standard, to tandems to hand bikes. Simply cycling had made the event possible for us all and even completed part of the course with us to troubleshoot if required. The route was flat and the weather was kind but still posed a huge challenge for the team. There were a variety of obstacles to navigate including pot holes on country lanes, speed bumps and live traffic. The conversation flowed well and I am pleased to report that the group I was in now have our death row meals sorted.

The final discipline was the walk/run. By now bodies were tired but everyone was still going and all still smiling. The group had now spread out along the course but there were huge smiles and encouraging words exchanged as everyone passed each other on the out and back course. One member of staff even crossed the finish line 4 times to ensure that no one was left to walk alone.

Every single team member crossed the finish line to be awarded their well deserved medals, each one with a huge smile and a sense of achievement like no other. In the car park followed the group photos, the beer (alcohol free), sausage rolls and cake (there was a birthday in our group after all). So on reflection would we do it all again? Absolutely!

All of the staff at the Specialised Ability Centre were so incredibly proud of the entire team. They put themselves way out of their comfort zone and completed an event that they had never even considered pre amputation let alone post amputation. Even when things got tough and people were beginning to tire, the motivation and drive to keep going was clearly visible and we all felt humbled to be able to play a part in this incredible journey. We spoke to some of the team a couple of days later when they attended the centre. The adrenaline was still running high.
There were more congratulations and smiles which made all of the organising worth it.

The main question…"When is the next event?"
I am pleased to report that they are now a feature on our annual team objectives.

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