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PAIN NEWS

A PUBLICATION OF THE BRITISH PAIN SOCIETY



The Body in Pain Series untitled #2. © Julia Hollander

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AVANOS

NEW

NICE INTERVENTIONAL PROCEDURE RECOMMENDATIONS

RADIOFREQUENCY DENERVATION FOR OSTEOARTHRITIC KNEE PAIN

<https://www.nice.org.uk/IPG767>

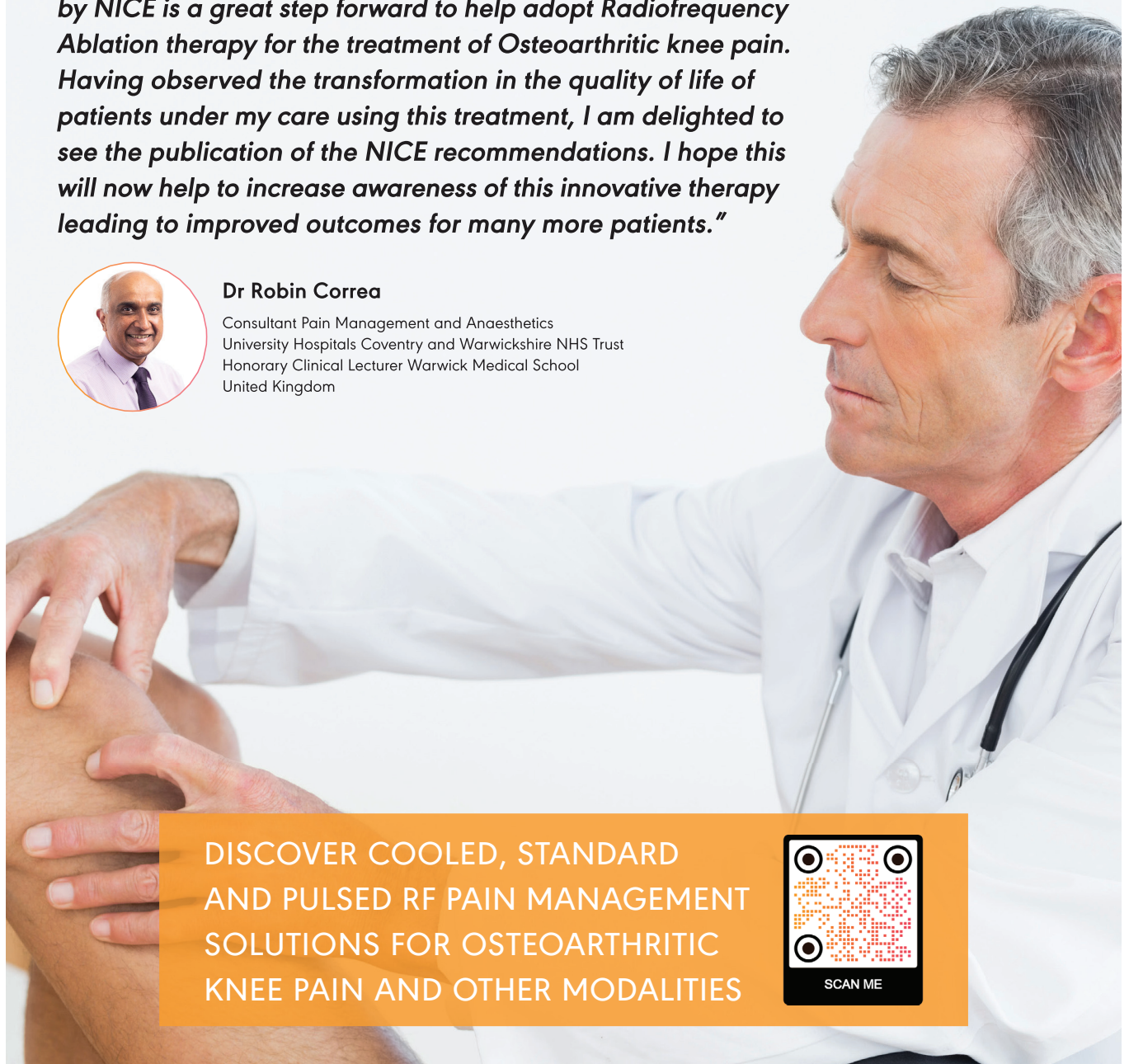
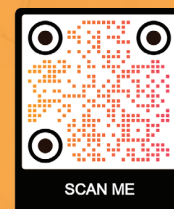
"The new interventional procedure recommendations published by NICE is a great step forward to help adopt Radiofrequency Ablation therapy for the treatment of Osteoarthritic knee pain. Having observed the transformation in the quality of life of patients under my care using this treatment, I am delighted to see the publication of the NICE recommendations. I hope this will now help to increase awareness of this innovative therapy leading to improved outcomes for many more patients."



Dr Robin Correa

Consultant Pain Management and Anaesthetics
University Hospitals Coventry and Warwickshire NHS Trust
Honorary Clinical Lecturer Warwick Medical School
United Kingdom

DISCOVER COOLED, STANDARD
AND PULSED RF PAIN MANAGEMENT
SOLUTIONS FOR OSTEOARTHRITIC
KNEE PAIN AND OTHER MODALITIES



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PAIN NEWS SEPTEMBER 2023

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Guest editorial

72 Pain, suffering and the artist part 1: Sinead O'Connor and protest – Julia Hollander

President's message

73 President's message – Roger Knaggs

Collage

75 Pictures from the BPS 2023 ASM

Articles

77 Pain news update autumn 2023 – Margaret Dunham

79 Working together to help people live well with chronic pain: a perspective from primary care – Tony Avery

82 CRPS Type I and the lightning process: case reports – Phil Parker and Fiona Finch

87 Service user evaluation outcomes of supported self-management 2022/2023 – Sonia Cottom

91 Citation for Professor Irene Tracey – Arun Bhaskar

93 Art and Pain: the British Pain Society summer retreat at Rydal Hall in Cumbria – Maureen Tilford

95 The POPPY Study: investigating short- and long-term outcomes from day case surgery – Matthew Everson, Martha Belete, William Hare, Anna Ratcliffe and Mark Rockett

97 Personal reflections on prescribing medical cannabis: evidence and independent practice – Ilan Lieberman

Book review

101 Pain and the Brain

End piece

102 The meeting

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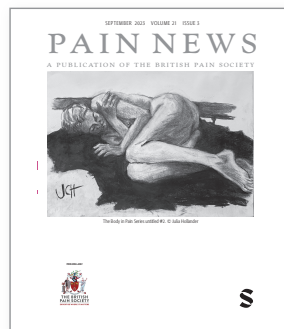
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REFERENCES

1. Electronic Medicines Compendium. (2022) Dzuveo 30mcg Sublingual tablet. Surrey, Electronic Medicines Compendium.
2. Deeks ED. Sufentanil 30 µg Sublingual Tablet: A Review in Acute Pain. Clin Drug Investig. 2019 Apr;39(4):411-418. doi: 10.1007/s40261-019-00772-x. PMID: 30887417.
3. Miner, J.R., Melson, T.I., Leiman, D., Minkowitz, H.S., Chiang, Y.-K., DiDonato, K.P. and Palmer, P.P. (2019). Pooled Phase III safety analysis of sufentanil sublingual tablets for short-term treatment of moderate-to-severe acute pain. Pain Management, 9(3), pp.259–271.
4. Fisher, D.M., Chang, P., Wada, D.R., Dahan, A. and Palmer, P.P. (2018). Pharmacokinetic Properties of a Sufentanil Sublingual Tablet Intended to Treat Acute Pain. Anesthesiology, 128(5), pp.943–952.
5. Minkowitz, H.S., Leiman, D., Melson, T., Singla, N., DiDonato, K.P. and Palmer, P.P. (2017). Sufentanil Sublingual Tablet 30 mcg for the Management of Pain Following Abdominal Surgery: A Randomized, Placebo-Controlled, Phase-3 Study. Pain Practice, [online] 17(7), pp.848–858.

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Common side effects: Anaemia, leukocytosis, hypocalcaemia, hypoalbuminaemia, hyponatraemia, insomnia, anxiety, confusional state, headache, dizziness, somnolence, sedation, sinus tachycardia, hypotension, pharyngolaryngeal pain, constipation, dyspepsia, flatulence, dry mouth, pruritus, muscle spasms, muscle twitching, urinary retention, oxygen saturation decreased, body temperature increased and anaemia postoperative.

For full list of side effects, consult SmPC.

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Pain, suffering and the artist part 1: Sinead O'Connor and protest

Julia Hollander

When singer/song-writer Sinead O'Connor was found dead in her London flat this summer, there was an outpouring of love from the public. Her untimely (and unexplained) death, so soon after the suicide of her beloved son, seemed to many a blessed release from an unbearably painful life.

I don't know no shame, I feel no pain, I can't



O'Connor in 1987 (8 December 1966–26 July 2023).
Public domain.

Listening again to O'Connor's searing vocal in her 80s' rock hit, *Mandinka*, I hear a much more powerful means of release: not in death but in song. Her shaven head, her voice vivid with emotion, her abandoned physicality in public . . . in the world of pop music, these traits seemed to signal defiance. At the same

time, they were signs of acute vulnerability. In another time and place, less commercial and more religious, it is the pilgrim in search of salvation who shaves their head and steps out into world to sing and dance their woes away.

Like Billie Holiday before her, O'Connor was brought up in an abusive home and sent to Catholic reform school where she was subjected to physical and spiritual cruelty. What both artists discovered when they were very young was that singing was a way to express this experience of pain. Music was a means of escape from the turbulence of their childhoods.

From a purely physiological point of view, we know that the act of singing produces high levels of natural analgesics, endorphins or endocannabinoids. It lowers cortisol and increases serotonin. It also produces large amounts of the 'love hormone' oxytocin. All of which explains why, if you are in pain, singing will help. In giving herself to that stonking drum beat, opening her mouth and allowing her whole body to resonate with pitched sound, O'Connor found a natural means of healing herself. In a way, it wouldn't have mattered what the lyrics were, as long as that physical communication was going on, held by the structure and solidity of the musical form. But by writing her own songs (something Holiday was less able to do because she lived in a more repressive period and was burdened by racial prejudice), she was also able to take possession of the material. Singing became a way to protest her own fragility in the face of injustice.

Then there is the context in which they sang. The audiences like you and me who, thanks to the recording industry, can still hear their music. It is in public performance that singers like O'Connor and Holiday make sure the world bears witness to their pain. In listening to their voices, we become the means not just of release but of healing.

The Royal Marsden Conference Team Upcoming Events

The ROYAL MARSDEN
NHS Foundation Trust

The 16th Annual Royal Marsden Breast Meeting

Friday 6th October 2023

Gastro-Intestinal Consequences of Cancer Treatments

Tuesday 7th November 2023

The 14th Annual Royal Marsden Head & Neck Cancer Conference

Friday 10th November 2023

The 8th Royal Marsden Lung Cancer Symposium

Wednesday 15th November 2023

The 16th Royal Marsden Opioid, Cannabinoid & Gabapentinoids

23rd – 24th November 2023

Adult Palliative Care Update

Thursday 30th November 2023

Interventional Approaches for Cancer Related Pain & Acute Pain and Persistent Post Surgical Pain

Thursday 14th December 2023

Digital Innovations in Cancer Management

Friday 15th December 2023

Paediatric Palliative Care: Cancer and Non-Cancer- Managing Complex Symptoms

Tuesday 6th February 2024

Register:

www.royalmarsden.nhs.uk/studydays



NHS

Special Interest Groups: Upcoming Conferences

Bookings are now open for two new conferences from our Special Interest Groups.

On October 27th, The Headache SIG presents a day of insightful talks and discussions at Churchill House in London, including new approaches to diagnosis, novel treatments, and emerging research. Including practical elements and interactive discussion, the day will present an opportunity to develop knowledge and share ideas in this important field.

Taking place on November 24th at University College London, the Interventional Pain Medicines SIGs Conference on Recent Advances promises to be a stimulating and informative event, providing a platform for sharing knowledge, discussing advancements, and networking with leading professionals in the field of interventional pain medicine. Attendees will enjoy carefully curated presentations from renowned experts who will cover cutting-edge topics and technologies.

All with an interest in the subject are welcome to book, and there are various preferential rates available for BPS members, Pain Medicine Trainees, and non-medics.

You can discover the agenda and register via the [BPS website](#).

President's message

Professor Roger Knaggs



Several years ago when I was Honorary Secretary, I wrote in Pain News that it can be difficult to predict what is going to be topical and relevant 2 months later. I am writing this column in mid-July when many of us are looking forward to taking some time away from work and it is meant to be Summer. However, the weather is not particularly seasonal and it feels more like Autumn. At the same time, many European countries are contending with a heatwave and the wide-ranging effects of global warming are increasingly apparent to all.

Looking back: Annual Scientific Meeting 2023

This is the first column in Pain News that I have written since the Annual Scientific Meeting in May, which now seems some time ago. It was great that so many colleagues were able to reconnect with friends whom they may not have seen for several years and make new acquaintances and connections. The ASM had a more international feel than recent years with delegates and presenters coming from 20 countries. Hopefully this is an indicator of the relevance and quality of the programme and content outside of the United Kingdom.

This issue of Pain News contains a couple of articles from the ASM. First, there is montage of photographs taken at the

ASM put together by Matthew Hall. I hope it captures a sense of the buzz and the vibe for those of you who were unable to attend this year. There is also a very reflective article from one of the plenary speakers, Professor Tony Avery. Tony is a General Practitioner and the NHS England Clinical Director for Prescribing. The article describes the numerous challenges faced when managing pain in primary care and the evolution of his knowledge and clinical practice about pain management.

It highlights potential opportunities for collaboration between generalist and more specialist services at both national and local levels. It may be worth reviewing the landscape locally and identifying key individuals whom you can work with to drive forward initiatives that can improve the lives of people living with pain. Following the ASM, Dr Lorraine de Grey (Dean of the Faculty of Pain Medicine) and I have met Tony on a couple of occasions and are continuing to discuss how specialist services can support and collaborate with primary care colleagues at a national level too.

The ASM next year is going to be held in Nottingham between 3 and 6 June, and the Scientific Programme Committee has already started discussing topics for plenary sessions and identifying potential speakers. They are also considering approaches to widen the reach and inclusivity of our flagship event to the clinical and research communities. By the time this issue of Pain News lands on your doorstep, you will have received the call to contribute to the ASM with proposals for parallel (workshop) sessions. So, think about how you could contribute to the ASM and share your experiences with other delegates.

Looking Forward

You will be aware the British Pain Society has had to make some significant changes to its Secretariat over the last few months. As our new Secretariat have become familiar with the day-to-day activities of running the Society, and these organisational changes are now beginning to have some impact, we can begin to move several major projects forward. It is pleasing to see the engagement with new initiatives, such as the proportion of members who take time to read the monthly BPS news and updates e-newsletters.

Thank you to those members who took the time to complete the member survey that closed recently. In total, 139 responses were received. Matthew Hall, our Executive Director, shared a preliminary analysis at a Council meeting a few weeks ago. Once a full analysis is completed, we will share the results with members, and also provide a 'you said, we did' update later in the year.

It perhaps will come as no surprise that education and networking remain key priorities for members. At the Council meeting, we agreed a short- to medium-term plan to address these issues. Without giving too much away, over the next few months you will see changes to the website, greater written content, and a more regular webinar programme, to name but a few.

We are also taking the opportunity to reinvigorate the standing committees (particularly the Education and Communication Committee) and supporting SIG activities. I have written on several occasions in Pain News about the importance I place on the SIGs to create a vibrant organisation, so I was heartened to see the number of people who stepped

forward to offer their support in the recent call for members of the SIG committees.

There are many people working on behalf of the Society, although if it is possible to share the load more widely, imagine how much more can be achieved. It is a very exciting time and the potential for both growth and impact is immense. It would be good if you were able to be part of this journey to rejuvenate and re-energise the pain community in the United Kingdom. So consider how you can support the work of the BPS and its activities.

As ever, my door remains open for BPS members to contact me about any issue related to the Society or pain management in general.

With best wishes,



roger.knaggs@nottingham.ac.uk



GLASGOW 2023 ANNUAL SCIENTIFIC MEETING

Hundreds of multidisciplinary professionals joined the British Pain Society in Glasgow for three days of insightful talks, practical workshops, social events, and opportunities to exchange best practice and new thinking in the field of pain.



Immediate Past President Dr Arun Bhaskar presents Dr Irene Tracey with Honorary Membership of the British Pain Society



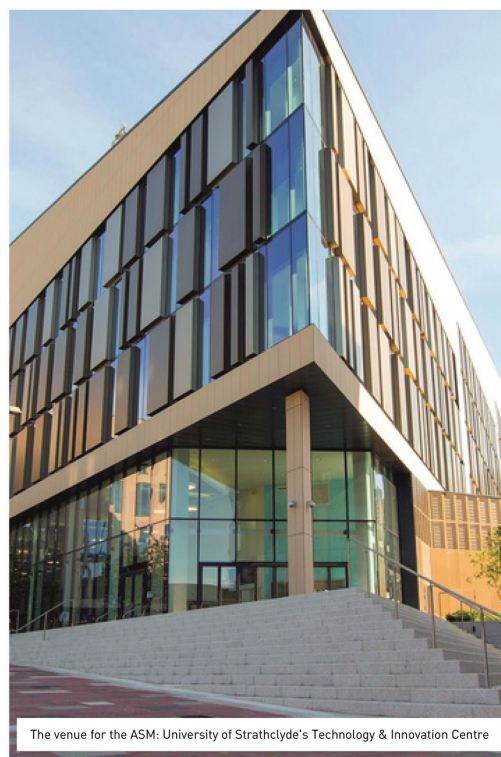
Dr Melissa Sanchez delivering a workshop



Poster Presenters (L-R): Reham Baamer, Anna Rita Galambos, Katrina Dick, Clare Bridgestock, Ting-Chen Hsu, Kristy Thelemis



BPS Council Members and Secretariat supporting a public outreach event at Glasgow Central Station



The venue for the ASM: University of Strathclyde's Technology & Innovation Centre

Pain news update autumn 2023

Margaret Dunham

Another year has gone so quickly and another ASM completed, with the joy of our first meeting completely face to face in sunny Glasgow, a smaller-scale affair than we have known but well worth the travel. It was a joyful experience with friends old and new, a little smaller than in pre-COVID times, but with some exciting and novel contributions from a new generation of pain clinicians and researchers over the course of 3 days. The highlights from Tuesday included a range of workshops, strategies for keeping a healthy working population, consideration of policy and practices towards pain at work, interfaces between cells and the environment and spinal cord simulation practices. Tuesday was capped off by the obligatory evening reception, with animated networking, mingling and the less well-practised buffet plate/cup/glass juggling competitions.

Wednesday kicked off with the importance of patient-centred strategies to support opioid regimens tapering or withdrawal. Beth Darnall from the United States gave her perspective on the North American approach to opioid management, which prompted some interesting discussion given the very different UK health system. At the AGM outgoing, president Arun Bhaskar handed over the reins to Roger Knaggs, which hails a continued move towards a multidisciplinary pain society reflective of the UK health care system and a financially secure future. Later we were spoiled for choice with four simultaneous workshops reflecting the use of digital data, pain in adolescence, pain in cancer and pharmacotherapy with genomic considerations. Data sources for population knowledge were ably presented by Ed Keough, Gary McFarlane and Frances Williams. The afternoon's workshops were no less generous with more psychology, cancer and opioid/medication management as part of the menu.

Thursday's smorgasbord of workshops and plenaries continued themes regarding opioids and children's chronic pain, alongside several 'meet the expert' sessions. The poster presentations were simply inspiring, with so much cleverness and potential for the future of pain management research ably articulated. The afternoon's debate was emotive: 'This House Believes that Amputation should be Offered for Intractable Neuropathic Pain', given the role that chronic pain may play in increasing the capacity for suicide. Perhaps a lighter topic for 2024? The closing session, with prize giving from Roger

Knaggs, came round far too quickly and, sadly, no dancing at this venue – but perhaps next year.

Don't forget this is your Pain Society, so if you want more from next year's ASM about older people's pain management, biology and cellular work, animal studies, psychological strategies or other specific populations/conditions, then contact us or the appropriate SIG committee; we don't bite–much!

In contrast, we are also in the midst of another heat wave, during a massive period of unrest, strikes and general turmoil surrounding uncertain economic futures. When will there be dedicated foodbanks for public sector workers, junior doctors even, as everyone struggles with inflation, mortgage hikes and understaffing everywhere. . .? And as for dentists and the increase in people pulling out their own teeth because of pain, this is hardly feeling like a 'golden age' for health care. Never has the general well-being of you, me and the rest of the health care/research/education workforce been so important if the National Health Institutes (NHS) is to keep going. So we are going to do our bit and keep pushing the importance of a healthy workforce and ageing population.

A big concern is that chronic pain is expensive, costly to the individual and society yet always subject to withdrawal of funding for provision within the UK healthcare system. So, if chronic pain can be predicted if not prevented, would that not be helpful? The journal *Nature Medicine* has recently published an interesting paper by Christophe Tanguay-Sabourin and colleagues,¹ proposing a novel approach for predicting chronic pain. This Canadian team accessed UK biobank data to propose a risk score, a tool framed around identified various biopsychosocial risk factors including sleep, body mass index (BMI) and experience of stress, and validated it using the Northern Finland Birth Cohort Data. The authors' concept for this is great, we can learn much from this exemplar, not only with a model that can be used in future pain research but also a great paper on how to access exiting data sets for information about the effects of pain, of which in the United Kingdom there are many (data sets and people living with chronic pain).

The concern for opioids does not seem to be diminishing and hopefully in the United Kingdom, we are not adopting

punitive approaches to care but supportive evidence-based strategies for pharmacological management of chronic pain. One positive outcome from all the noise and pressure surrounding opioids is inspired new research that evidences, rather than anecdotally informs, the practice of opioid prescribing. The recent OPAL study² is a novel and original study, an Australian triple-blinded randomised controlled trial (RCT), supporting the notion that opioids have no significant effect for low back pain or neck pain. However, this was a small-scale study of only 347 participants. If this study were to be repeated, it would be helpful to stratify results by age and consider the implications/confounding potential of chronological age and any comorbidities.

Am I alone in thinking that surgical procedures for chronic pain are largely a thing of the past? Continuing with the search for evidence-based practice, a recent systematic review³ confirms the limited evidence for the effectiveness of discectomy or epidural steroid injections.

The other positive outcome from the COVID pandemic is the acceleration of use of technology to complement and support existing health and social care delivery. Communication and assessment via telehealth/video calls/computer applications is something we have to embrace if the needs of older and more remote/isolated populations are to be met. Technology is always

cautiously approached, quite rightly, but like the mythological Pandora's Box, once opened it is impossible to close. A recent Guardian opinion⁴ piece expresses concern about this shift to online treatment. However, the concern about volume, 1 in 3 mental health treatments offered online, misses an important point that many more people may be able to access online therapies than could travel to attend a hospital appointment.

When pain research is so vital, so is the understanding of what makes working in pain management a good place to be. A study of US pain physicians suggests there are many facets to job satisfaction,⁵ including pay and workload. The emotional, physical and psychological needs of a health care workforce need much more evidence-based support if we are to sustain an NHS for when we retire and need it most!

References

1. Tanguay-Sabourin C, Fillingim M, Guglietti GV, et al. A prognostic risk score for development and spread of chronic pain. *Nat Med* 2023; 29(7): 1821–31.
2. Jones CMP. Opioid analgesia for acute low back pain and neck pain (the OPAL trial): a randomised placebo-controlled trial. *Lancet* 2023; 402(10398): 304–12.
3. Liu C, Ferreira GE, Abdel Shaheed C, et al. Surgical versus non-surgical treatment for sciatica: systematic review and meta-analysis of randomised controlled trials. *BMJ* 2023; 381: e070730.
4. Taylor R. *Concern as a third of NHS mental health treatments shift online*. The Guardian 2023. <https://www.theguardian.com/society/2023/jul/02/concern-as-a-third-of-nhs-mental-health-treatments-shift-online> (accessed 14 August 2023)
5. Maloney JA, D'Souza RS, Buckner Petty SA, et al. Job satisfaction among pain medicine physicians in the US. *J Pain Res* 2023; 16:1867–76.

Working together to help people live well with chronic pain: a perspective from primary care

Tony Avery *National Clinical Director, NHS England*

Supporting patients with chronic pain can be challenging for many health care professionals. The common experience of many general practitioners (GPs) I talk to is that we don't feel well equipped to help these people and can feel frustrated that little we do seems to help. Recommendation after recommendation¹ in recent years has been telling us that most drugs (including opioids) do not work for a wide range of chronic pain conditions, and we are left asking 'Well, what are we supposed to do to help people?'. One thing we can do is refer to a 'pain clinic', and this can be helpful, but as Craig and Mulla point out in their excellent article in *Pain News* from December 2022, there were just 0.8 pain specialists per 100,000 UK patients in 2016.^{2,3} Given that a recent systematic review suggests that up to 28 million people in the United Kingdom (43%) are living with chronic pain⁴ and that we have over a million people receiving regular opioid medicines,⁵ GPs necessarily restrict their referrals to patients they feel to be in greatest need of specialist care. Given this situation, what can we do to better help people to live well with chronic pain and avoid the use of medicines where they may be doing more harm than good? The British Pain Society and Faculty of Pain Medicine have done much to address these questions, with many pain specialists showing great leadership in their localities and nationally. As the National Clinical Director for Prescribing, I am keen to build on this and to work with you to help ensure even better support for people living with pain. In this article, I share some thoughts on this, including the perspectives I bring as a practising GP.

GP education, training and support

It goes without saying that GPs need a tremendous breadth of knowledge to practise effectively, along with a wide range of skills, particularly communication skills. With the increasing complexity of health and social care, and the dizzying array of pathways for referrals and other support for patients, GPs also need to be adept at identifying relevant information at speed; it is no longer possible to rely upon baseline knowledge and skills alone because the world is changing too quickly for that. This does mean that, while I think GPs are very good at keeping up

to date, it is impossible to have an in-depth knowledge of everything, and occasionally we may not be fully aware of major shifts in thinking that have an important bearing on our clinical practice.

One such area is the revolution that has taken place in our understanding of pain, and particularly how best to help people with chronic pain. In recent months, I have had the privilege of spending many hours talking to experts in pain management and to people who have been helped to live well with pain; I have also benefitted from learning more about chronic pain through reading the work of pain specialists including Deepak Ravindran, Helen Miranda and Lorimer Moseley.^{6–8} This has helped to shift my thinking by recognising the difference between nociception and the pain experience; how people can become sensitised to experiencing pain, but also how a wide range of biopsychosocial approaches can help people live well with their pain.

While there are many competing demands for the limited time GPs have available for continuing professional development, I am convinced that knowledge and understanding of chronic pain should be a priority. With this, I think we will be more likely to recognise when a patient is developing chronic pain and less likely to give escalating doses of medication. Furthermore, it is more likely that we will offer biopsychosocial approaches early, including referral to pain services, rather than as a later option (following referrals for investigations and surgeries that may prove unhelpful and can sometimes cause harm).

One of the best ways of engaging with GPs is for consultants (and other pain specialists) to do this locally. For example, in Nottinghamshire, we have benefitted from having Roger Knaggs speak to us about opioids; in Gloucestershire, Cathy Stannard and Helen Makins have done great work engaging with local GPs, and in Oxfordshire, Jane Quinlan provides valuable educational sessions for GPs. Most general practices have time set aside for learning events (often called protected

learning time [PLT]); there is a lot of competition for PLT slots, but I think most GPs would welcome an update on chronic pain from a local specialist. In addition to improving knowledge, I think it would be very beneficial to provide GPs with additional training in the skills needed to help people with chronic pain. This might include ways of explaining chronic pain to patients and how to explain the rationale for biopsychosocial interventions when a patient may be wanting and expecting a biomedical cure for their pain. Other approaches include online learning resources⁹ and presentations at educational update sessions provided by national organisations.

Furthermore, it helps for GPs to have resources at their fingertips to provide patients with access to information on chronic pain and the (limited) place of medications in helping with this. *Opioids Aware*¹⁰ is a great example of this, including the section *about pain for patients*, and the NHS website also has useful advice,¹¹ as do other resources such as *Live Well with Pain*;¹² I think we need to do more to promote these resources to colleagues in primary care.

Offering a wider range of services for patients

Providing consistently high-quality accessible multidisciplinary services for patients experiencing chronic pain has been a long-standing challenge in the United Kingdom, highlighted in the 2012 National Pain Audit,¹³ and the Faculty of Pain Medicine is currently carrying out a gap analysis to provide a more up-to-date picture. This will be helpful in documenting likely improvements over the last decade in the minimum multidisciplinary standard of a psychologist, physiotherapist and physician. It will also help to encourage integrated care boards (ICBs) to commission the necessary specialist services if these currently do not meet the standards.

Specialist pain services clearly have a very important role in helping patients with chronic pain and are an essential resource. From my perspective as a GP, access to specialist care can be extremely helpful when there is uncertainty around diagnosis, particularly if there is a potentially treatable underlying condition, or for people with psychological issues as well as pain. It can also be very helpful in situations where we are struggling to optimise pharmacological treatment or to help patients taper from multiple high-dose medications for their pain. With a multidisciplinary approach, specialist pain clinics can also help patients understand the biopsychosocial triggers for their pain and equip them to live better with their pain. Nevertheless, as noted by Craig and Mulla,² it is unlikely that we will reach a situation in the NHS where everyone with chronic pain has access to specialist services. Therefore, we

need to be looking at approaches that bridge the gap between what has traditionally been available in primary and secondary care.

Across the country, there are some great examples of widening access to pain services and support, involving the NHS, local authorities and the voluntary sector, and many of these have been led by pain specialists. From my perspective, one of the key things we need to be trying to provide is early access to education and support for people with chronic pain, to avoid some of the protracted pain journeys we see for many patients (involving multiple unnecessary referrals, investigations and interventions and the cocktail of dependence-forming medicines that many patients find themselves on). This is becoming increasingly available in parts of the country. For example, in Nottinghamshire, GPs can refer patients early to a community-based pain pathway involving detailed assessment by an advanced practitioner and then onward advice and support including an 8-week educational programme (covering topics like activity, pacing, dealing with flare-ups, sleep and diet) and a wide range of biopsychosocial interventions that can help people living with chronic pain. In Gloucestershire, Cathy Stannard has led the co-design of a range of initiatives that have improved the support available for people living with pain, and a particular feature has been involving social prescribing link workers and voluntary services. In Cornwall, Sean Jennings (someone with lived experience) and colleagues have set up 'pain cafes'¹⁴ with funding from the local ICB to provide support for people living with pain, including Dr Frances Cole's '10 footsteps to living well with pain' course.¹² It is heartening to see what is happening across the country through local initiatives that draw upon current best practices.

Policy initiatives

The initiatives now taking place across the country are very much in line with policy initiatives, building on NICE (National Institute for Health and Care Excellence) guidance.^{1,15} This can help us all make the case (both locally and nationally) for improving services and support for patients living with chronic pain.

Several NHS England initiatives are focused on tackling overprescribing of dependence-forming medicines, and in many cases, this involves wider initiatives to help people living with chronic pain. The Medicines Safety Improvement Programme¹⁶ has the aim of reducing harm from opioid medicines by reducing high-dose prescribing (>120 mg daily oral morphine equivalent). Taking a 'whole system approach', currently 31 out of 42 ICBs have engaged in this work, and

Working together to help people live well with chronic pain: a perspective from primary care

already we are seeing encouraging reductions in prescribing. Earlier this year, NHS England published its framework for action for ICBs and primary care to optimise personalised care for adults prescribed medicines associated with dependence or withdrawal symptoms.¹⁷ Among other things, this calls on ICBs to ensure appropriate commissioning of services for patients taking medicines associated with dependence or withdrawal symptoms, including services for patients wishing to reduce or stop these medicines.

All this is backed up by additional substantial investment in primary care roles (pharmacists and physiotherapists being examples of this) as part of the Additional Roles Reimbursement Scheme¹⁸ and investment in social prescribing link workers¹⁹ from the NHS and local authorities. The recent inclusion of musculoskeletal disorders in the government's major conditions strategy²⁰ may also provide opportunities for further investment in services for people living with chronic pain. Also, it is important to note that the introduction of ICBs is breaking down silos between sectors in health and social care, to facilitate the sort of joined up working we need to improve services and support for people living with chronic pain.

Working together

There is a lot of great work taking place across the country to improve the care and support for people living with chronic pain, and current policy initiatives in the NHS will help to bring about further improvements. In my work as the National Clinical Director for Prescribing, I recognise the importance of local leadership in facilitating change, and pain specialists have demonstrated the difference they can make. Working together (across nations,²¹ between health care, social care, the voluntary sector and including people with lived experience), we have an opportunity to help ensure that, across the country, people receive early education, advice and support on their chronic pain journey, thus avoiding unnecessary and unhelpful interventions. We can also provide better ongoing support to those people living with long-term chronic pain, helping them to 'live well' with their pain while also supporting them in tapering from medicines that may be doing them more harm than good. I appreciate this is not straightforward but based upon modern approaches to helping people with chronic pain; the inspirational leadership I have seen around the country and numerous examples of success, I am

optimistic that we can bring about the necessary transformative change.

References

1. NICE. Chronic pain (primary and secondary) in over 16s: Assessment of all chronic pain and management of chronic primary pain. Available online at: <https://www.nice.org.uk/guidance/NG193>
2. Craig T and Mulla N. A retrospective analysis of opioid prescriptions in patients referred to secondary chronic pain services. *Pain News* 2022; 20(4): 91–4.
3. McGhie J and Grady K. Where now for UK chronic pain management services? *Br J Anaesth* 2016; 116(2): 159–62.
4. Fayaz A, Croft P, Langford RM, et al. Prevalence of chronic pain in the UK: A systematic review and meta-analysis of population studies. *BMJ Open* 2016; 6: e010364.
5. NHS England. Reducing long-term opioid use. Available online at: <https://www.england.nhs.uk/long-read/reducing-long-term-opioid-use/>
6. Ravindran D. *The Pain-Free Mindset*. London: Vermillion, 2021.
7. Miranda H. *Rethinking Pain*. London: Hammersmith Health Books, 2019.
8. Butler D and Moseley L. *Explain Pain*. Adelaide, Australia: Noigroup Publications, 2013.
9. Faculty of Pain Medicine of the Royal College of Anaesthetists. e-PAIN: The resource for NHS workers who want to better understand and manage pain. Available online at: <https://fpm.ac.uk/e-pain>
10. Faculty of Pain Medicine of the Royal College of Anaesthetists. Opioids aware. Available online at: <https://www.fpm.ac.uk/opioids-aware>
11. NHS. Ways to manage chronic pain. Available online at: <https://www.nhs.uk/live-well/pain/ways-to-manage-chronic-pain/>
12. My Live Well with Pain. Ten footsteps to living well with pain. Available online at: <https://my.livewellwithpain.co.uk/resources/self-management/ten-footsteps-to-living-well-with-pain/>
13. British Pain Society. National pain audit final report 2010–2012. Available online at: https://www.britishpainsociety.org/static/uploads/resources/files/members_articles_npa_2012_1.pdf
14. Cornwall Connected by Pain. Stronger together: Learning to live well with pain. Available online at: <https://pain.cafe/>
15. NICE. Medicines associated with dependence or withdrawal symptoms: Safe prescribing and withdrawal management for adults. Available online at: <https://www.nice.org.uk/guidance/ng215>
16. NHS England. The National Patient Safety Improvement Programmes. Available online at: <https://www.england.nhs.uk/patient-safety/patient-safety-improvement-programmes/>
17. NHS England. Optimising personalised care for adults prescribed medicines associated with dependence or withdrawal symptoms: Framework for action for integrated care boards (ICBs) and primary care. Available online at: <https://www.england.nhs.uk/long-read/optimising-personalised-care-for-adults-prescribed-medicines-associated-with-dependence-or-withdrawal-symptoms/>
18. NHS England. Expanding our workforce. Available online at: <https://www.england.nhs.uk/gp/expanding-our-workforce/>
19. NHS England. Social prescribing link workers. Available online at: <https://www.england.nhs.uk/personalisedcare/workforce-and-training/social-prescribing-link-workers/#:~:text=Social%20prescribing%20link%20workers%20connect,housing%2C%20financial%20and%20welfare%20advice>
20. Department of Health and Social Care. Major conditions strategy: Call for evidence. Available online at: <https://www.gov.uk/government/consultations/major-conditions-strategy-call-for-evidence/major-conditions-strategy-call-for-evidence#the-major-conditions-strategy>
21. Faculty of Pain Medicine of the Royal College of Anaesthetists. Four nation strategy for pain management 2022. Available online at: <https://fpm.ac.uk/four-nation-strategy-pain-management>

CRPS Type I and the lightning process: case reports

Phil Parker and Fiona Finch

Summary

Complex Regional Pain Syndrome Type I (CRPS I), previously known as reflex sympathetic dystrophy (RSD), is a chronic pain disorder that usually occurs after trauma, and often affects the limbs.¹

The pain, motor and signs of autonomic dysfunction that are common features of CRPS I can result in long-term impacts on function and work status for two-thirds of those affected, suggesting a need for researching new approaches.

The lightning process (LP) is a positive psychology-focused self-management programme which has been shown to be effective in reducing chronic pain and symptoms suggestive of autonomic disturbances. Here, we report on its application to three patients with CRPS I who reported resolution of their symptoms and a return to full function post-intervention which was maintained on follow-up.

Learning points/take home messages

- Novel approaches to the treatment of CRPS I may provide viable intervention options.
- The LP has been shown to improve outcomes for a range of chronic health conditions and these effects may be transferable to CRPS I.
- LP can be delivered in small groups and online, making it suitable for delivery to those who experience difficulty in accessing services.
- Post-LP patients reported resolution of pain, motor and signs of autonomic dysfunction, other physical signs and symptoms, and return to full function and school/work, indicating recovery from CRPS I.
- Follow-up studies with more patients and control groups are needed to replicate these findings and assess the efficacy and cost-effectiveness of the LP for CRPS I.

Introduction

Complex regional pain syndrome (CRPS) is classified into two types, Type I, previously called reflex sympathetic dystrophy, and Type II, previously called causalgia. They are distinguished by the absence (Type I) or presence (Type 2) of nerve injury.

Diagnosis of Type I, the focus of this case report, is confirmed by the presence, often in the limbs, of at least one of the following signs and symptoms: oedema and an alteration of sudomotor activity, changes in peripheral blood flow and resulting trophic changes, reduced movement or range of movement, hypersensitivity to touch and hyperalgesia.² The prevalence is difficult to estimate due to under- or misdiagnosis³ although two studies report 5.577⁴ and 26.2⁵ cases per 100,000 people per year. Its pathophysiology appears to include some localised alteration in immune response and dysautonomia and there is some evidence for a genetic influence, although this has not been replicated in larger cohort studies and the rarity of the condition makes such association studies difficult.⁶ Long-term effects are common with one systematic review reporting that one-third of those with CRPS did not return to work and another third returned but only with the assistance of some form of workplace adaptation.² The chronic symptoms of CRPS I also result in a reduction of function and social activities and health-related quality-of-life (QOL) is low when compared to other long-term conditions such as chronic lung disease and diabetes.⁷ The challenging outcomes for those with CRPS I suggest the need to research new approaches to provide additional routes for treatment.

The LP is a positive psychology-focused mind-body self-management training programme delivered in small groups face-to-face or live online. It has a growing evidence base for its efficacy in improving outcomes for a range of chronic issues including Chronic Pain, Fibromyalgia, Migraine, Chronic Fatigue Syndrome/Myalgic Encephalomyelitis (CFS/ME),^{8–14} and has been used by many with CRPS I and other dysautonomia disorders since its inception in 1999. We present three cases, with follow-up, of patients from England, Europe and the United States, who used the LP for their CRPS I and report the effects of the intervention on their symptoms and recovery.

Patient information, clinical findings and diagnostic assessment

Case 1

A 9-year-old male, identifying as White British, reported acute symptoms of persistent severe burning pain and hypersensitivity to touch in the right ankle and foot following

CRPS Type I and the lightning process: case reports

mildly 'turning his ankle' at soft play. Weight-bearing was too painful to manage, and the severe hypersensitivity resulted in the touch of his bed sheets on the affected area being experienced as unbearable.

The severe pain resulted in a general practitioner (GP) referral, 8 weeks later, to a Paediatric Orthopaedic Surgeon at Leicester Royal Infirmary. Examination revealed mottled and discoloured skin, reduced temperature of the affected area and hypersensitivity to the lightest touch. These features along with the absence of any physical findings from magnetic resonance imaging (MRI) and X-rays led to the diagnosis of CRPS I. After this diagnosis, Hypermobile Ehlers–Danlos syndrome was additionally diagnosed by a paediatric rheumatologist which may have contributed to the development of CRPS I.

Low-dose amitriptyline was prescribed at bedtime to aid sleep. Physiotherapy and desensitisation treatment were tried but with little improvement. The patient relied on a wheelchair and crutches for mobility. His mood was affected by bouts of low mood and anger which developed as the condition continued and this was improved by referral to art therapy.

Due to the overall lack of improvement, the family looked for other options. Discovering the positive LP experiences of other young people with CRPS I the patient decided to take the LP, as a face-to-face seminar, in 2020.

Case 2

A 26-year-old female, identifying as Danish but living in the United States, reported chronic symptoms of persistent severe burning pain, allodynia and stabbing pain, muscular spasms, oedema, trophic changes in the skin changes and hypersensitivity to touch. The symptoms followed an ankle sprain and undiagnosed fracture at age 18. They affected the left foot and ankle and spread to the right foot, to both thighs, upper and lower arms, and hands. She was unable to weight bear and had to remain in bed; unable to shower or wear clothes on the affected areas.

The severe pain resulted in a referral to a pain specialist at Aarhus, Denmark. Examination, nerve conduction tests, and the absence of any physical findings, except the fracture, from MRI and evaluation by the Budapest criteria led to the diagnosis of CRPS I.

Over the intervening years, the patient tried many different medications (including gabapentin, Lyrica, low-dose naproxen, morphine, methadone, low-dose antidepressants, ketamine and dextromethorphan) and treatments (including spinal cord

stimulation, nerve blocks, physiotherapy, Scrambler therapy, ARPwave, microcurrent and TENS).

By the time the patient started LP there had been some improvement. She was able to weight bear but was only able to walk 1,000 steps in a day; she still required help with tasks such as cutting an apple and reported being in permanent pain throughout the day.

The lack of recovery and persistent pain resulted in the patient exploring the research on neurological pain which supported her decision to take the LP as a face-to-face seminar in 2016.

Case 3

A 9-year-old male, identifying as White British, reported acute symptoms of persistent severe burning pain and hypersensitivity to touch in the left foot following a minor fracture of the cuboid bone while playing in a national-level competitive football match. Weight-bearing increased the pain and the lightest touch (breathing on the area or the weight of a grain of rice) resulted in severe pain. The pain was constant, often worse at night and disrupted the patient's sleep.

The severe pain resulted in a GP referral, 5 weeks later, to an Orthopaedic Surgeon at Stepping Hill Hospital, Stockport. Examination identified hypersensitivity to the lightest touch and the report of severe persistent pain along with the absence of any physical findings from blood tests, MRI and X-rays led to the diagnosis of CRPS I.

A range of pain medications was prescribed including paracetamol, morphine and naproxen, but had little to no effect on the pain and caused side effects of severe nausea and drowsiness. The patient relied on crutches for mobility and could not attend school.

Physiotherapy was recommended but due to the discomfort of attending sessions and the consultant's advice that 'the condition was untreatable but would go in time' the family searched for other options. Discovering the positive LP experiences of other young people with CRPS I, the patient decided to take the LP, via Zoom, in 2023.

Therapeutic intervention

The LP utilises discussion, gentle movement and meditation-like techniques developed from Positive Psychology, health education theory, mindfulness and coaching (see full protocol¹⁵). It is designed to help individuals to develop a conscious influence on their neurological function and through that affect change in physiological processes.¹² The focus for CRPS I

patients is to use the LP to downregulate the hypersensitivity of the nervous system and through that improve immune system function to address the pathophysiological factors of dysautonomia and immune system dysfunction.

The tools of the LP are applied to encourage the development of self-compassion¹⁶ and flourishing,^{17,18} through a self-coaching approach. There is a focus on using salutogenic and active language¹⁹ and training in techniques that use savouring of memories that recall previous experiences of desired health goals and states to improve physiology.^{20,21}

Prior to taking the LP the three patients listened to Part 1 of the LP, a 4-hour audio programme focused on CRPS I, prior to discussing their issues with their LP practitioner and receiving some initial coaching. Part 2 consisted of 3× 4-hour interactive training sessions, which were designed to help individuals understand and apply the LP technique to their own symptoms. Three hours of post-seminar support was also provided. All patients consented to take part in the intervention with the understanding their cases may be published.

Follow-up and outcomes

Case 1

Pain. His pre-LP pain levels of 10/10 dropped to 1/10 by day 3 of the LP and to 0/10 (pain free) by day 10, where it has remained since.

Function, activities and follow-up. On the evening of day 1 of the LP he took his first steps unaided in 7 months. The following morning, he was starting to walk up and down stairs. On day 4 after starting the LP he was running up and down stairs, bouncing on a trampoline, cycled 2 miles and was able to comfortably kick a football with either foot. It took a few weeks to return to 'normal' activity levels due to the time needed for the calf muscles to recover from the wastage from 7 months of inactivity.

In the 3 years since taking the LP, there has been no return of the CRPS I symptoms and he continues to lead an active and healthy life.

Case 2

Pain. Prior to the LP any increase in activity resulted in an increase in pain. After the LP the patient was able to increase her exercise levels to normal, over time, but with no pain.

Function, activities and follow-up. Pre-LP, her maximum swimming distance was less than 150m, with post-exertional flare-ups.

Within 30 days this had increased to swimming 1,000m, with no side effects.

She returned to her previously 'very active life' with swimming, walking, dancing, running, CrossFit, skiing and travelling. She also resumed her university studies, but this time without requiring an assistant to write her notes and exams, drive her to the doorstep or carry her bag.

Since the LP she has become a mother. She also reports that she now fully recovers from occasional running injuries (from running too much) and although she has occasional small relapses (pain and allodynia) using the LP tools she has managed to get back on track quickly.

Case 3

Pain. Pre-LP pain levels were 10/10. After day 1 of the LP there was no change. After day 2 it had lowered to 1/10, even when his foot was being touched. He took 11 steps across the room and was able to use the LP tools to stop and then reduce and get rid of the pain. He no longer needed his pain medications. By the end of day 3 of the LP, he was climbing the stairs, kicking a soft ball with his other foot, balancing and getting used to walking after nearly 8 weeks of inactivity. On day 4 after the LP, he went to school for half a day and only needed to use the LP tools once to get rid of the pain.

Function, activities and follow-up. Within a week of the LP, he was playing football and back at school full time and starting to regain the activity levels he had prior to his CRPS I. This included travelling to London to watch his footballing teammates play at Wembley Stadium.

Patient and parents' perspective

The three participants and their carers were given the opportunity to feedback on their personal perspectives on the intervention and their understanding of its effects. They were keen to provide this as they felt the intervention had made a difference to their recovery.

Case 1

The parents expressed the change they had observed as follows:

We felt the LP had given us our boy back. It still feels like a dream when I think back to it. It truly is/was a modern-day miracle . . . We emailed the medical professionals we had seen too but no one replied, which was disappointing.

CRPS Type I and the lightning process: case reports

Case 2

The participant articulated her experience as follows:

When I was sick with CRPS I really couldn't bear to think about a long life. The pain was too unbearable. I know I was a hard case. So many doctors have told me that. Therefore, it feels so magical to be pain-free today and have an active life as a full-time student and being a mom and a wife. When I've told professionals about my case, they've been shocked – but in a good way. They've also wanted the best for me, but they have never imagined that I could get into remission. I'm living a perfectly normal life as a strong, happy and healthy woman. I'll forever be so grateful for this new life. I honestly couldn't have dreamed of a better one!

Case 3

The parents reflected on the pre-and post-LP experience as follows:

Morphine made him sick, and naproxen didn't work any better than ibuprofen. The CRPS flare-ups at night were the most heart-breaking, as he became desperately tired, but the pain was very severe and made getting to sleep very difficult. He tried to manage the pain breathing and we tried our best to distract him, but he spent lots of time as the days went on just whimpering and crying. The sensitivity and the background pain levels were increasing the week he started LP. We went from a nightmare of despair and worry. We had no plan as to how we were going to help our little boy get rid of the nasty syndrome. Then we watched a miracle before our eyes as our boy's mental strength completely blew us away. He was determined he would follow in those other LP success stories' footsteps and would be walking around the Sealife Centre the day after the course, and he was! We are absolutely overjoyed, overwhelmed and cannot believe the speed at which he has recovered and how quickly he was able to get on board with the process, make changes within a few minutes and work with his practitioner to get his life back. He made an absolute MIRACLE happen with the help of LP.

Discussion

LP is an established positive psychology focused self-management intervention used to treat chronic mental and physical health conditions. This paper reports for the first time on the application of the LP to the management and long-term outcomes of three cases of CRPS I. All patients reported a relatively rapid resolution of their pain, hypersensitivity to touch

and other physical symptoms and return to full function and activity levels following the intervention.

These changes were sustained, and no recurrence of the condition was reported during the long-term follow-up. We acknowledge the limitation of simple case study reports and that we cannot be certain the improvements were attributable to the LP rather than the passage of time. The Patients' Perspectives, however, provide some qualitative indications that the patients felt the intervention was responsible for the improvement of their symptoms.

Conclusion

The poor outcomes for many with CRPS I^{4,5} suggest the need for additional approaches for this challenging condition. The LP's evidence base for helping those with chronic pain and other issues with a dysautonomia pathophysiology identifies it as a potential intervention for this condition.

Pain specialists and GPs can easily signpost patients to the Register of Licenced Practitioners for prompt assessment and intervention delivery. The LP's self-management and peer support focus and delivery via digital technology are in line with UK recommendations for treatment.^{22,23} These case reports on CRPS I and the LP suggest that research to further assess its effectiveness would be beneficial.

Conflict of Interest

The author(s) declared the following potential conflicts of interest with respect to the research, authorship, and/or publication of this article: PP declares an interest in the intervention 'The Lightning Process' as its originator; FF declares a historical interest in the Lightning Process as a former practitioner. In accordance with your policy and my ethical obligation as a researcher, I (PP) am reporting that I have a financial interest in a company that may be affected by the case studies reported in the enclosed paper. I have disclosed those interests fully to you, and in the process of the research, the authoring team have created an approved plan for managing any potential conflicts arising from that involvement.

References

1. Goh EL, Chidambaram S and Ma D. Complex regional pain syndrome: A recent update. *Burns & Trauma* 2017; 5: 2.
2. Johnson S, Cowell F, Gillespie S, et al. Complex regional pain syndrome what is the outcome? A systematic review of the course and impact of CRPS at 12 months from symptom onset and beyond. *Eur J Pain* 2022; 26(6): 1203–20.
3. NHS. Complex regional pain syndrome. Available online at <https://www.nhs.uk/conditions/complex-regional-pain-syndrome/> (19 October 2017, accessed 17 March 2023).
4. Sandroni P, Benrud-Larson LM, McClelland RL, et al. Complex regional pain syndrome type I: Incidence and prevalence in Olmsted county, a population-based study. *Pain* 2003; 103(1–2): 199–207.
5. de Mos M, de Bruijn AGJ, Huygen FJPM, et al. The incidence of complex regional pain syndrome: A population-based study. *Pain* 2007; 129(1): 12–20.
6. Birklein F and Dimova V. Complex regional pain syndrome–up-to-date. *Pain Reports* 2017; 2(6): e624.

7. van Velzen GAJ, Perez RSGM, van Gestel MA, et al. Health-related quality of life in 975 patients with complex regional pain syndrome type 1. *Pain* 2014; 155(3): 629–34.
8. Crawley E, Gaunt D, Garfield K, et al. Clinical and cost-effectiveness of the Lightning Process in addition to specialist medical care for paediatric chronic fatigue syndrome: Randomised controlled trial. *Arch Dis Child* 2018; 103:155–64.
9. Finch F. LP snapshot survey for clients. Available online at <https://doi.org/10.13140/RG.2.2.23107.35366> (2010, accessed 16 July 2013).
10. Finch F. Outcomes measures study. Available online at <https://doi.org/10.13140/RG.2.2.29818.24002> (2013, accessed 5 June 5 2018).
11. Finch F. MS proof of concept study. Available online at <https://doi.org/10.13140/RG.2.2.26462.79686> (2014, accessed 5 June 5 2018).
12. Parker P, Aston J and Finch F. Understanding the Lightning Process approach to CFS/ME; a review of the disease process and the approach. *J Exp Psychother* 2018; 21(2): 8.
13. Parker P, Aston J and de Rijk L. A Systematic Review of the Evidence Base for the Lightning Process. *EXPLORE* 2020; 17(4): 372–79.
14. Fauske L, Bruland ØS, Dahl AA, et al. Does the lightning process training programme reduce chronic fatigue in adolescent and young adult cancer survivors? A mixed-methods pilot study. *Cancers* 2021; 13(16): 4076.
15. Parker P. LP protocol 2020, 2020. Available online at <https://doi.org/10.13140/RG.2.2.22761.72801>
16. Neff KD, Kirkpatrick KL and Rude SS. Self-compassion and adaptive psychological functioning. *J Res Personal* 2007; 41(1): 139–54.
17. Parker P, Banbury S and Chandler C. Efficacy of the rediscovery process on alcohol use, impulsivity and flourishing: A preliminary randomised controlled study and preliminary cohort study. *EJAPP* 2020; 4: 13. Available online at <https://www.nationalwellbeingsservice.org/volumes/volume-4-2020/volume-4-article-13/>
18. Parker P, Banbury S and de Rijk L. Self-control or flourishing? A thematic analysis of experiences of alcohol users of the rediscovery process. *Int J Ment Health Addict* 2021; 20: 2382–99.
19. Antonovsky A. The salutogenic model as a theory to guide health promotion. *Health Promot Int* 1996; 11(1): 11–8.
20. Bryant FB, Smart CM and King SP. Using the past to enhance the present: Boosting happiness through positive Reminiscence. *J Happiness Stud* 2005; 6(3):227–60.
21. Speer ME and Delgado MR. Reminiscing about positive memories buffers acute stress responses. *Nature Human Behaviour* 2017; 1(5): 0093.
22. Greenhalgh T, Knight M, A'Court C, et al. Management of post-acute covid-19 in primary care. *BMJ*. 2020; 370: m3026.
23. NICE. COVID-19 rapid guideline: Managing the long-term effects of COVID-19. Available online at <https://www.nice.org.uk/guidance/ng188> (11 November 2021, accessed 9 March 2023).

Service user evaluation outcomes of supported self-management 2022/2023

Professor Sonia Cottom *Director, Pain Association Scotland*

Pain Association Scotland – Who We Are

Although it was very informative about new interventions and what's on the horizon for future research, without labouring the point, a key topic which failed to make the cut at the 56th British Pain Society Annual Scientific Meeting was self-management. While many of the sessions alluded to the benefits of psychological input, it is important to ensure that self-management remains on the agenda, to show the improvements to someone's quality of life by putting them at the centre and meeting their needs.

Pain Association Scotland provides professionally led, supported self-management education and training in the community, offering key coping strategies and helping people explore new ways forward, leading to an improved quality of life. These groups have enabled chronic pain sufferers to make changes to their everyday lives in a positive and practical way, resulting in improved levels of coping and well-being.

We have developed expertise in an effective, interactive, person-centred approach which helps to engage people in the principles of self-management and motivates them to adopt new ways of thinking based on a better understanding of their health and themselves.

In general terms, self-management can be described as a set of approaches which aim to support people to feel able to live well on their terms with a long-term condition. It includes a spectrum of support that helps someone to learn about their condition, acknowledge the impact it has on their life, make changes and identify areas where they require support. A simple definition that is sometimes used is, *self-management simply means anything that you can do to improve the quality of your life*. A broader definition could be, *There are lots of things that make pain worse that you're in charge of, that your doctor can't affect much: like stress, anxiety, communication, confidence, sleep, pacing, understanding pain, attitudes and your relationship with pain*. Participants attending the supported self-management sessions will be at different

'stages of change' with a wide variation of needs and motivations. It is also likely that many people have significant levels of co-morbidity. It requires skill to deal with such a mixed group of people.

Chronic pain is a major personal, social and economic issue. For the majority of those suffering from chronic pain, it is not about the length of time they have had the pain, it's about the loss of function, loss of identity, loss of mental health and indeed, for many, a loss of hope (Eccleston, 2011, 2016).

Looking ahead and moving beyond the pandemic, it is important to be mindful that the effects of COVID will be felt for a long time in the pain world. Increased demand will meet with limited capacity – lengthy waiting lists are inevitable.

Despite all the information and benefits around self-management, many people remain reluctant to access it. This can be either when they are referred by a healthcare professional or even if they are simply given information about it. The messages given by referring clinicians can make a huge difference, but unfortunately, there is wide variation. Some people are well briefed, while others say that they were just told to attend without explanation. It is important to try and fill this gap in the pre-course information and when people join the course, but what clinicians say always carries a great deal of weight.

Like all pain management work, the idea of a non-medical paradigm is not always popular at the outset.

The self-management course does not claim to change pain levels but rather aims to reduce the suffering component and change maladaptive habits. As a result of understanding more and changing behaviours, some people do report a change in their pain levels or fewer flare-ups or reliance on medication, but most report a change in how they feel about their condition and their life. For many, this is a shift away from being a 'victim'; this is often characterised by the move from focusing on what

they can't do to what they can. Others talk about feeling less isolated and more in control. These are significant issues that herald an improvement in health and well-being.

Putting all this together, key outcomes delivered during 2022/2023 are as follows:



1130 hours of supported self-management training.



2,835 people registered to attend the monthly supported self-management group meetings.



418k social media activity.

Methods

People who had accessed the online monthly self-management group meetings were invited to complete a questionnaire via SurveyMonkey to show the difference it had made to their quality of life.

There were 64 responses with the majority of respondents (55%) being of working age. Chronic pain can therefore no longer be treated as an older person's disease. Interestingly, 83% of those surveyed were not currently on any National Health Service (NHS) waiting list for treatment. The questions were based on the following categories:

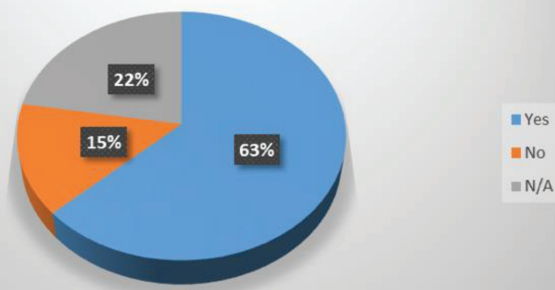
- Length of time they had the pain;
- What benefits they experienced from attending the groups;
- The impact on their quality of life;
- Whether they had seen their GP less regarding their pain; and
- Coping on a day-to-day basis.

Results

Some of the key outcomes are as follows:

- 95% advised that attending the group helped them maintain their self-management skills;
- 82% felt more in control;
- 90% felt more able to cope on a daily basis;
- 60% had fewer visits to their GP as result of attending the groups;
- 43% have been living with chronic pain for over 10 years; and
- The top 3 topics include: Pacing, Stress and Flare-ups.

Have you seen your GP less regarding your chronic pain?





Discussion

This unique model of community-based education and support programmes, delivered in collaboration with referring Health and Social Care professionals, has been developed to improve quality of life and well-being. Key features are as follows:

- Person-centred and outcomes-focused;
- Enables people to live independently in the community by improving quality of life for people with chronic pain and their carers;
- Collaboration and joint working among and within agencies and organisations to improve outcomes for service users; and
- Co-operation with service users and carers in assessment and support as well as in the planning, development and delivery of services.

Delivery of supported self-management is person-centred and based on a bio-psycho-social model. This means that the work is not just about pain, but rather deals with pain in the wider context of life, health and well-being. The combination of education, training and support in a group setting encourages peer support and thereby engenders normalisation. Working with people in this group context means that they can hear from others in a similar situation, discuss ideas, benefit from

mutual support and thereby integrate self-management into everyday life.

Conclusion

One of the mechanisms responsible for the improvements in health status, demonstrated by those attending self-management programmes, is self-efficacy. Adherence or, more precisely, concordance with medical treatment, is closely linked to the patient's ability to self-manage their chronic pain and is shown to be an important factor in determining increase in self-efficacy.

The self-management programmes do not claim to change pain levels but rather aim to reduce the suffering component and change maladaptive habits. As a result of understanding more and changing behaviours, some people do report a change in their pain levels or fewer flare-ups or reliance on medication, but most report a change in how they feel about their condition and their life. For many, this is a shift away from being a 'victim', which is often characterised by the move from focusing on what they can't do to what they can. Others talk about feeling less isolated and more in control – these are significant issues that herald an improvement in health and well-being. was somehow lost somewhere in the dark where I didn't see any lights. But this programme has given me some

I was somehow lost somewhere in the dark where I didn't see any lights. But this programme has given me some light of hope in my life. I am thankful to the Pain Management Association, Scotland for organizing this kind of programme



The pain association sessions have been so beneficial to me that I don't know what I'd do if it was no longer available, as there is very little support of any kind within healthcare.

light of hope in my life. I am thankful to the Pain Management Association, Scotland, for organising this kind of programme.

The self-management course is delivered in a way that creates a powerful therapeutic alliance, or rapport, which is essential to all good therapeutic work. Features of this approach are as follows: honesty, empathy, knowledge, credibility and the drawing out of the ability of the group to share experiences and support each other.

Every session is flexible and interactive in that the session is run in a way that responds to the needs of the group. This is a significant point of departure from many self-management approaches which are often seen as more 'rigid' and 'teachy'.

People with chronic pain require far more than clinical help. The right medication can help, but it is rarely a complete solution. Many people continue to live with pain despite the best medical service possible. Even cases of expensive implant surgery for spinal stimulators rarely mean that pain completely resolves, meaning that ongoing management is still needed.

If the value of self-management and reducing people's long-term reliance on specialist services and treatments which demonstrate low clinical efficacy is clear, then patients need help to be better engaged with the concept of self-management. It is appreciated that time is maybe limited to explain self-management and it is also recognised that many people might not absorb all the details during a general practitioner (GP) appointment, but this is maybe an example of the type of action needed within a future framework around pathways, language and a more holistic modelling approach.



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Citation for Professor Irene Tracey

Dr Arun Bhaskar *Immediate Past President British Pain Society*



It is my great honour and immense pleasure to provide a citation for Professor Irene Tracey.

Professor Tracey needs little introduction to most delegates attending the Annual Scientific Meeting and to the British Pain Society. She has been at the forefront of pain research and neuroimaging for over 25 years.

Professor Tracey undertook her undergraduate and postgraduate studies at the University of Oxford in Biochemistry, where she learnt the skills of her trade developing the use of magnetic resonance imaging methods to study disease mechanisms in humans, under the supervision of Professor Sir George Radda. After holding a postdoctoral position at Harvard Medical School, she returned to Oxford in 1997 and was a founding member of the Oxford Centre for Functional Magnetic Resonance Imaging of the Brain.

Over 25 years, Professor Tracey and her multinational and multidisciplinary research group has advanced the understanding of pain neuroscience, particularly pain perception and analgesia within the human central nervous system using functional magnetic resonance imaging and other advanced neuroimaging techniques using novel experimental paradigm designs. Among other achievements, her group have demonstrated the complexities of pain perception, how pain is influenced by mood, learning and expectation and highlighted the importance of developing objective and neuronal pain biomarkers. Professor Tracey has left a substantial legacy, having supervised dozens of doctoral students and mentored numerous postdoctoral researchers. Sometimes it can seem difficult to go to a pain conference throughout the world without attending a session that includes a current or previous member of her research group.

Professor Tracey has held numerous administrative positions at the University of Oxford, including the Director of the Oxford Centre for Functional Magnetic Resonance Imaging of the Brain between 2005 and 2015, while holding the Nuffield Chair in Anaesthetic Sciences, Head of the Nuffield Department of Clinical Neurosciences (2016–2022) and Warden of Merton College from 2019 to 2022. In January 2023, Professor Tracey became the Vice-Chancellor of the University of Oxford.

In addition to these roles at the University of Oxford, Professor Tracey has contributed to many organisations, including the International Association for the Study of Pain, British Neuroscience Association, Lundbeck Brain Prize Committee and even as a co-opted member of the British Pain Society Council to represent science. She is currently a member of the Council of the Medical Research Council and is President of the Federation of European Neuroscience Societies.

Throughout her career, Professor Tracey has made her research accessible to the public. She has appeared numerous times on local and national radio and television, including as the creator and presenter of a two-episode programme in 2017, *From Agony to Analgesia*. Other events include an exhibition at The Science Museum in London, public lectures at DANA, University Museum, Cheltenham, and multiple newspaper and magazine articles. She was profiled in *The Lancet*, interviewed

in April 2019 for BBC Radio 4's *The Life Scientific* with Jim Al-Khalili and listed in *The Times* 2020 Life Sciences Global 'Power List'. It is timely that in the week following a coronation in a profile published in *The New Yorker* in 2018, Professor Tracey was described as the 'Queen of Pain'.

Professor Tracey's achievements have been recognised by numerous societies including being awarded the triennial Patrick Wall Medal from the Royal College of Anaesthetists in 2008. In 2015, she was elected a Fellow of the Academy of Medical Sciences. Other awards include the British Neuroscience Association's Outstanding Contribution to Neuroscience award in 2018 and being elected an honorary fellow of The Physiological Society in 2022. In the 2022 New Year Honours List, Professor Tracey was appointed a

Commander of the Order of the British Empire for services to medical research.

By coincidence, Professor Tracey today also has become a Fellow of the Royal Society. She alone will know whether this or becoming an Honorary Member of the British Pain Society is a greater achievement!

In such a short time, it is not possible to give recognition to all of Professor Tracey's achievements in the advancement of the understanding of pain and its management. For these reasons and so many more, it is therefore such a great pleasure to give this citation on behalf of Professor Irene Tracey CBE FMedSci FRS for the award of Honorary Membership of the British Pain Society.

Art and Pain: the British Pain Society summer retreat at Rydal Hall in Cumbria

Maureen Tilford *Secretary Philosophy and Ethics SIG*



For several years, usually at the end of June, the Philosophy and Ethics Special Interest group has held summer meetings often at Rydal Hall, a magnificent Georgian mansion set in 30 acres of garden and parkland in the Lake District. The place is truly unique.

Once again, this year at Rydal, we arrived on the Sunday evening in time for tea with everyone leaving on the Wednesday after lunch. The days spent during the retreat this year were a great mix of interesting talks, plenty of discussion and debate interspersed with hours of relaxation and conversation.

Some enthusiasts got up early and headed off for a swim in Rydal Water followed by Tai Chi in the gardens, then breakfast. Each speaker had plenty of time to explore their subject followed by 30 minutes of lively discussion. On the Monday and Tuesday, between 2 and 4 pm, we all headed off for walks around the Rydal gardens and parkland, or swimming or just relaxing and reading. Evenings after dinner, some of us made the short walk to the local pub, The Badger.

The theme this year was 'Art and Pain: The Role of the Arts and Humanities'.

On day one, our speaker was Dr Deborah Padfield. Her title was 'Encountering Pain'. Deborah is a visual artist and Senior

Lecturer in Arts and Health Humanities at St George's, University of London, where she directs workshops and modules bringing science, medicine and health care into dialogue with the arts and humanities. She is also an Associate Professor at the Slade School of Fine Art.

In her sessions, she explored her research themes involving photographic images, co-created with people with pain, to facilitate doctor–patient communication. She involved the group in an exercise using photographs and drawings which produced some amazing and varied results from the participants.

On day two, Dr Jens Foell's title was 'In pain's presence: how clinicians behave with people in pain, a philosophical, psychological and sociological exploration'.

Jens is a GP in Wales with experience in rehabilitation. He spoke about the cognitive dissonance encountered in primary care when the patient's expectations are out of synchrony with what the doctor can offer. He explored the huge complexity involved in pain and suffering intermixed with the patient's early life experiences and their social environment. He explored the philosophical themes involved in the work of the doctor and looked at the tensions between bureaucratic concerns such as protocols and targets versus the skilful and compassionate work of the physician. His talk was a detailed dive into complex ideas.

Following Jen's talk, Laura Rathbone spoke on 'The Role of the Humanities: Exploring New and Classic Resources About Pain'. Laura is a qualified physiotherapist and completed her MSc in Advanced Neuromusculoskeletal Physiotherapy at King's College, London, where she explored the philosophy and complexity of pain. She spoke about her interest in the humanities as an interdisciplinary field bringing together areas like art, literature, social sciences, ethics and philosophy and so helping clinicians connect to what it is like to experience illness and be a patient. Her enthusiasm and energy were infectious.

Art and Pain: the British Pain Society summer retreat at Rydal Hall in Cumbria

After lunch, we enjoyed our usual 2-hour afternoon break to swim, walk or do nothing, after which Dr Mike Hudspith gave his talk entitled 'A Genesis of Pain'. Mike is a consultant in pain medicine, and in his talk, he considered in depth the issue of how to bring understanding and the relief of pain within the disparate factors contained in the bio-psycho-social model. Clearly each component is relevant but often viewed as very different. For Mike, a question remains: Can we better explain how these factors might be causal to the underlying pain experience – and can we in consequence unify our model(s) of pain?

Our first speaker on the Wednesday morning was the Vice-Chair of The British Pain Society's Patient Voice Committee, Tim Atkinson. Tim is a volunteer with Pain Concern, Lived Experience Trainer on the *Live Well With Pain* programme and contributor to the *Flippin Pain* campaign. He is also a former teacher, chronic pain sufferer and author of several books, including the very personal story: '*Where Does it Hurt*'. Tim discussed in a wide-ranging talk his learning about the science

of pain, its medical management, self-management and the importance of having agency.

Finally, our Philosophy and Ethics Special Interest Group Chair, Tim Johnson gave a talk on 'The Role of Music'. Tim is an anaesthetist who has been running a pain clinic for several years. In his talk, Tim played a series of musical pieces, looking at the often profound emotional effects we experience when listening to music.

Throughout the retreat, there was a constant buzz of lively conversation and quite a lot of laughing! Many delegates had been to it before, including some 'regulars' from Australia, Norway and New Zealand. However, we had new people this year, all of whom said they were planning to come along next time, and we have tentatively reserved the dates: 23–26 June 2024.

It rained a little, but it didn't seem to dampen our enthusiasm.

On the Philosophy and Ethics Special Interest Group website, we have archived transcripts of all the talks at previous summer meetings. For example, in 2017, we looked at the problems of palliative care: 'Living Well Right to the End'. The year before that we considered the role of the mind 'The Power of the Mind in Pain'. There are also reports of our webinars which are run monthly from September.

<https://www.britishpainsociety.org/philosophy-ethics-special-interest-group/>

The POPPY Study: investigating short- and long-term outcomes from day case surgery

Dr Matthew Everson *SWARM Research Fellow, Registrar in Anaesthesia and Intensive Care Medicine, Royal Devon University Healthcare NHS Foundation Trust, Exeter*

Dr Martha Belete *RAFT Chair, Registrar in Anaesthesia, University Hospitals Plymouth NHS Trust, Plymouth*

Dr William Hare *Co-Investigator for POPPY Study, SWARM Chair, Registrar in Anaesthesia, Torbay and South Devon NHS Trust, Torbay*

Dr Anna Ratcliffe *Co-Investigator for POPPY Study, Registrar in Anaesthesia, University Hospitals Plymouth NHS Trust, Plymouth*

Mark Rockett *Chief Investigator for POPPY Study, Consultant in Anaesthesia and Pain Medicine, University Hospitals Plymouth NHS Trust, Plymouth; Honorary Associate Professor, Faculty of Health, University of Plymouth*

Following the success of previous national RAFT (Research and Audit Federation of Trainees, www.rafrainees.org) projects, including iHype (Intraoperative Hypotension in the Elderly) and DALES (Drug Allergy Labels in Elective Surgical population), RAFT will soon be undertaking its fourth national research project, the POPPY study: *Patient reported Outcomes, postoperative Pain and Pain relief in day case surgery*. This snapshot observational study aims to measure patient-reported outcomes in UK day case surgery patients. This includes capturing the short-term outcomes of quality of recovery, pain severity and acute analgesic use. It will also look at the long-term outcomes, including the incidence of persistent post-surgical pain and persistent postoperative opioid use, which has not been investigated previously in the UK day case population.

In 2021, anaesthetic trainees from SWARM (South West Anaesthetic Research Matrix, www.ukswarm.com) successfully had their proposal adopted as the next RAFT national project in a competitive process. Since winning the pitch proposal, SWARM has worked alongside the RAFT committee, University Hospitals Plymouth research team, pain specialists, statisticians and lay members. This allowed evolution of the topic selection, development of the protocol and widening the scope to include patient-reported outcomes. Long-term follow-up will use an innovative automated text message system to collect outcome data after hospital discharge. This is a novel method for

postoperative follow-up at this scale. We will run a qualitative study alongside the quantitative study, looking in detail at the peri-operative experiences of a subgroup of patients from the main study who report persistent pain and opioid use 3 months after their surgery.

Currently, approximately 70% of operations in the NHS are carried out as day cases,¹ with patients considered to be suitable having increasingly complex comorbidities. It is therefore important to understand the different short- and long-term trajectories of recovery. Patients undergoing day surgery will often have variable or no planned follow-up, resulting in significant negative outcomes going unrecognised. There is increasing evidence that day case patients commonly develop long-term health problems following surgery, including persistent post-surgical pain;² pain continuing beyond 3 months postoperatively is common with up to 18% of surgical patients suffering long-term moderate to severe pain.³ Inappropriate long-term opioid use after surgery from mismanaged persisting pain or opioid misuse disorder is a major public health concern, with 6% of opioid-naïve patients in the USA using opioids persistently.⁴ Discharge opioid prescriptions are frequently not patient- or procedure-specific, and overprescription is a serious concern.^{5,6} Persistent post-surgical pain and persistent postoperative opioid use are significant problems in day case patients, but information about the UK population is lacking.

The POPPY Study: investigating short- and long-term outcomes from day case surgery

The POPPY study has been granted funding from the NIAA and University Hospitals Plymouth charitable research fund. The study is adapted to the NIHR portfolio, has HRA and REC approval and adapted to the Associate PI scheme. An embedded pilot project is underway, with the national project following on in January 2024.

The POPPY study spans perioperative medicine, pain medicine and day case surgery, thus appealing to pain specialists, anaesthetists and trainees. As with previous RAFT studies, trainee anaesthetists at each site will be invited to undertake recruitment and engage in data collection on the day of surgery, alongside other pain specialists. This will offer an opportunity for those involved to develop basic research skills. Our study aims to help inform surgical, anaesthetic, pain and prescribing practices that have an impact on short-term recovery, which could reduce the risk of developing both persistent post-surgical pain and persistent postoperative opioid use.

For more information, email to plh-tr.poppystudy.raft@nhs.net or visit the website www.RAFTtrainees.org or the handles @thepoppystudy and @RAFTtrainees



References

1. GIRFT Getting It Right First Time. National day surgery delivery pack, 2020. Available online at <https://www.gettingitrightfirsttime.co.uk/bpl/day-surgery/> (accessed 20 September 2022).
2. Hoofwijk DMN, Fiddlers AAA, Emans PJ, et al. Prevalence and predictive factors of chronic postsurgical pain and global surgical recovery 1 year after outpatient knee arthroscopy: A prospective cohort study. *Medicine* 2015; 94(45): e2017.
3. Johansen A, Romundstad L, Nielsen CS, et al. Persistent postsurgical pain in a general population: Prevalence and predictors in the Tromsø study. *Pain* 2012; 153(7): 1390–6.
4. Brummett CM, Waljee JF, Goesling J, et al. New persistent opioid use after minor and major surgical procedures in US adults. *JAMA Surgery* 2017; 152: e170504.
5. Delaney LD, Gunaseelan V, Rieck H, et al. High-risk prescribing increases rates of new persistent opioid use in total hip arthroplasty patients. *The Journal of Arthroplasty* 2020; 35(9): 2472–9.
6. Daliya P, Adiamah A, Roslan F, et al. Opioid prescription at postoperative discharge: A retrospective observational cohort study. *Anaesthesia* 2021; 76(10): 1367–76.

Personal reflections on prescribing medical cannabis: evidence and independent practice

Dr Ilan Lieberman



As Pain doctors, it is likely that most of us will have come across medical cannabis in recent years since the legislation changed in November 2018. Whether it be from prescribing colleagues, or from direct patient enquiries, or even through the media – one way or another medical cannabis has piqued our interest. A minority may have been sufficiently interested to take the plunge and to join a cannabis clinic. But with only

approximately 30 pain prescribers in the United Kingdom today, it is safe to assume that the majority of pain consultants are still in the ‘undecided camp’, watching the industry and evidence base develop. I also believe that the silent majority will be unlikely to prescribe through a cannabis clinic, irrespective of the evidence base.

I sat in this latter group of clinicians; both mindful & intrigued by the fact that clinicians elsewhere in the world consider that medical cannabis is a helpful therapy but not having taken the leap to actually prescribe. The simple reason for my reticence was because I perceived the status quo to prescribing in this country was *only* via a cannabis clinic. I have not been tempted to join a cannabis clinic myself as I want to prescribe to my existing cohort of patients and new patients who I think might benefit from medical cannabis based on their medical history, in the comfort of my own clinic and maintaining my independence.

I suspect there are other colleagues who find themselves in a similar position. Colleagues in the private sector who get frustrated when they are unable to answer patient enquiries relating to cannabis and feel obliged to refer patients elsewhere, but who also recognise that we who sit in the private sector have the opportunity to be providing an

enhanced patient experience to those in the National Health Service (NHS) and that includes embracing new medicines and technologies for our patients.

It is for this reason that I felt compelled to write this article – to share my journey and ultimately provide support to those for whom my journey may resonate.

As with any journey to prescribing a new medicine or using a new technology, it first and foremost has to start with the evidence

Despite the increasing interest and research into cannabis for treating pain, the National Institute for Health and Care Excellence (NICE)¹ actively recommends not to prescribe the drug. I also note the updated Faculty position statement on the medicinal use of Cannabinoids in Pain Medicine, that encourages the development of databases (with caveats) to contribute to the evidence base. Now these may or may not be the right decisions. I respect that the Faculty has taken a precautionary approach and that the decisions that NICE make govern prescription throughout the NHS with all the cost and complexity that this brings.

But as an independent pain clinician, I have been following the development and debate around medical cannabis over the past 10 years, and as such I cannot reconcile the fact that citizens in Australia, Canada, Israel, Germany, Poland, Japan and in various states across the United States have access to medically managed cannabis prescription. I do not believe that pharmacological governance in these countries is derelict or cursory – quite the contrary.

I have also managed difficult pain and spasm issues with *licensed* cannabinoid medicines such as Sativex and Nabilone, and have learned that they can be remarkably effective for a small minority of individuals. It is this experience that has partly driven my desire to explore and prescribe *unlicensed* cannabinoid medicines (or rather medical cannabis) within my usual private practice.

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When one considers the current evidence base it is true that few RCTs have directly examined the efficacy of medical cannabis in chronic pain. However, one has also to acknowledge that the motivation and funding to undertake such expensive trials is likely to be absent for the foreseeable future for a variety of commercial reasons. However, prospective large-scale cohort studies have found statistically significant improvements in pain intensity and a decrease in opioid use,² with these positive outcomes sustained at one year follow-up.

Review studies have also shown effectiveness for the treatment of pain using cannabis,^{3,4} along with it being safe and effective for other symptoms associated with chronic pain such as insomnia and anxiety,⁵ compared to standard medications.

A crossover trial⁶ published in 2010 demonstrated that cannabis is well-tolerated in patients, improving symptoms and sleep. Meanwhile, registry data⁷ suggests that medical cannabis is effective in treating pain, with significant improvements in self-reported measures and few adverse effects.

There is also encouraging evidence with regard to cannabis reducing opioid consumption among chronic pain patients. Self-reported questionnaire data supports the efficacy of medical cannabis for quality-of-life ratings in chronic pain patients over a 6-month period,⁸ where the consumption of analgesic medication decreased with increased concentrations of tetrahydrocannabinol (THC) at a given intensity of pain.

The benefits of cannabis in pain management appear to be the greatest in patients with chronic conditions, particularly where opioids have proved ineffective.⁹ Since cannabis is predominantly effective in treating chronic as opposed to acute pain, the reported quality-of-life ratings are of particular significance.

It is my view that evidence from these studies certainly demonstrates feasibility and effectiveness in prescribing cannabis for pain management with long-term improvements in at least some patients. No one will ever consider that a single pharmacological approach will benefit everyone. The mantra of right time, right place, right person must apply for any medical intervention.

We know that it is particularly challenging to manage persistent pain pharmacologically and we are all aware that current medications may often be problematic due to their risk of abuse, dependency, side effect profile, and lack of efficacy. CBPMs may also have some of these issues. However, the

supportive evidence of CBPMs, in my opinion, suggests that they may offer benefit in some patients, and they may well be safer to take in the long term than some of the current medications we offer.

In summary this emerging body of evidence, in my opinion, does demonstrate efficacy, particularly in terms of quality-of-life ratings among patients and the reduction of harm caused by opioid medications – both of which are factors that are difficult to achieve in pain management treatment given its biopsychosocial nature. In particular, the quality-of-life improvements are my main interest. These benefits include reduced anxiety, improved sleep and lower levels of depression that, in turn, improve patients' quality of life and their ability to manage their condition.

So, why has there been such resistance towards prescribing cannabis for pain management in the United Kingdom?

My personal view is that the sudden policy shift witnessed in 2018 did not involve clinician engagement and was in many respects a knee-jerk reaction to several high-profile public campaigns. This lack of clinical engagement has proven problematic, since clinicians are a key stakeholder group that must be consulted if the industry seeks widespread access.

As such, prescribing, in many regards, has remained a contentious issue due to the way it was legalised, spearheaded by enthusiasts, advocates and patients in pain – an uncommon way to see a medicine rescheduled.

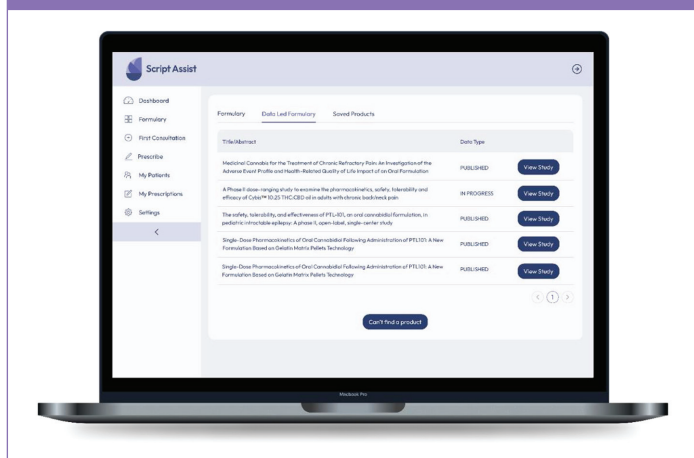
Currently the vast majority of prescribing takes place through cannabis-specific clinics. Though this provides a quick route of access to patients, the approach is not aligned to the UK healthcare sector as no other medicine has such dedicated clinics, rendering cannabis-specific clinics as an anomaly.

Albeit unintentionally, I therefore believe this approach has marginalised cannabis treatment still further and created a form of exceptionalism. A clinic dedicated to a single product inherently creates a prescribing bias, as opposed to encouraging a holistic, balanced and ethical approach to patient care.

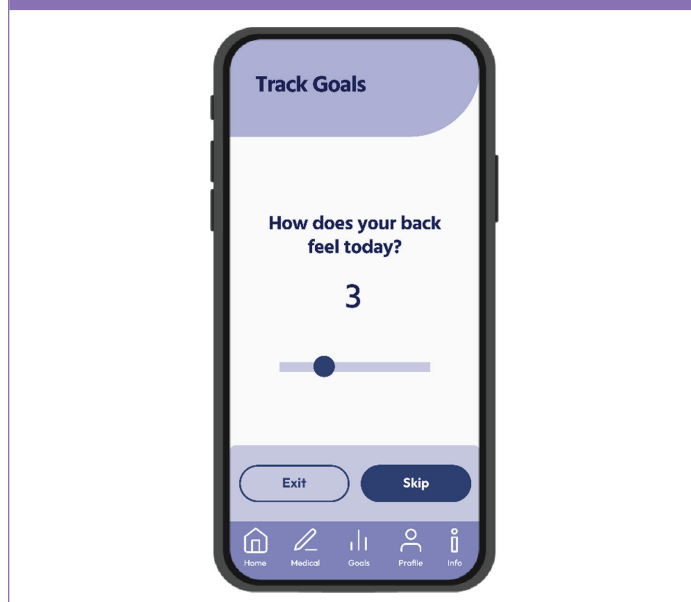
As a result, the cannabis sector has remained isolated and distinct from the broader UK healthcare sector, which is clearly a barrier when attempting to integrate a new medicine and fundamentally limits patient access. In my opinion we need to transition away from this clinic model towards integration into existing clinical settings.

Personal reflections on prescribing medical cannabis: evidence and independent practice

Picture 1. Data led formulary.



Picture 2. Patient tracker patient app.

**Which is where my prescribing journey began . . .**

As I have made clear, I never wanted to join a cannabis clinic, but I did feel like ignoring the issue was doing my patients a disservice and, in all honesty, I also felt I was doing myself a bit of a disservice as a clinical specialist in my field of Pain. I have always strived to offer the best care I can, and it has troubled me that if I were practising in other countries I would be prescribing medical cannabis, ergo why not here and now?

And so, I started to look for alternative models and became involved with the development of the Script Assist platform.

When I met the team, they too were committed to engaging independent specialists to prescribe medical cannabis, rather than through dedicated cannabis clinics. As a licenced importer and distributor of medicines, they were the first company I came across who understood that evidence was a key component to engaging cannabis-sceptic clinicians, and are committed to sourcing products that have either completed or are undergoing clinical trials. Of course, it seems obvious, but their indication-specific cannabis-based formulary is the only one based on published peer-reviewed data that I have seen in this space.

But that's only half the journey . . .

Because, when you are talking about an unlicensed controlled drug, such as medical cannabis, combined with the enduring legacy of one of the worst global public health disasters in Pain medicine that was the opioid epidemic, the clinical risk can never be overstated. The overarching principal is that the prescribing of medical cannabis needs to

nest in the control of the physician looking at the entire 'picture' of the patient. Ultimately (and clearly following the necessary regulation), it should be no different than initiating any other medication: it needs to be undertaken with appropriate care as part of a holistic approach to management of a long-term condition.

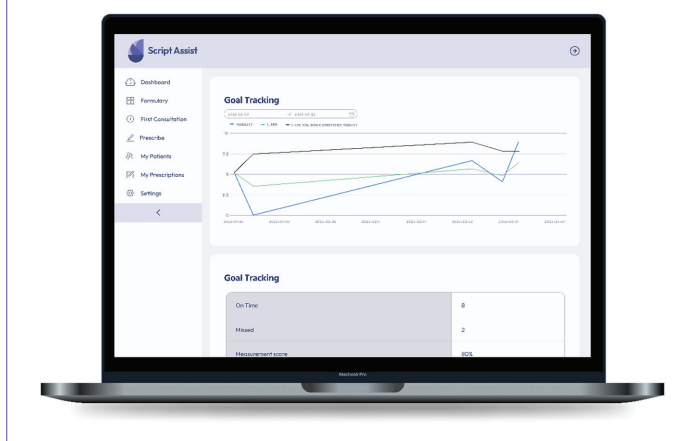
And so, working closely with the team, I worked through the clinical governance challenges facing independent specialists and developed Script Assist, a free-to-use digital platform designed to facilitate cannabis prescription within a clinician's usual medical practice focused on patient safety, and simultaneously reducing the risk for doctors who may be new to prescribing cannabinoid medications.

There are some regulatory fundamentals that we cannot challenge or streamline – such as the requirement to apply for a pink FP10 PCD prescriber pad, or the fact that the medicine cannot be dispensed without a 'wet' signature. Although of course, when you consider that the responsibility for the risk of any medicines ultimately falls on the prescriber, an additional layer of governance and protection is not wholly unwelcome.

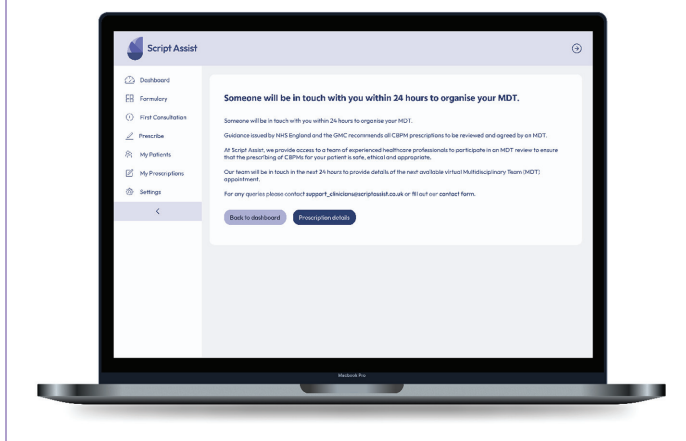
Indeed, risk mitigation through controlled prescribing lies at the heart of the platform's design and build. Onboarding and automated verification ensure clinician readiness to appropriately prescribe, alongside the ability to select from a

Personal reflections on prescribing medical cannabis: evidence and independent practice

Picture 3. Graph data.



Picture 4. MDT review.



formulary of data-led products.

The platform also requires patients to gather data on their symptoms using the complimentary patient app, and one is also able to set bespoke goals designed in collaboration with patients to help them achieve the quality-of-life objectives they desire. This not only helps my patients with their journey but also gives full visibility into the medicine's efficacy and thereby enables and supports re-prescribing.

All new prescriptions are reviewed by a multidisciplinary team (MDT) of experienced cannabis prescribers. This is necessary to be compliant with GMC guidance and has also opened up a network of colleagues that I have found incredibly supportive. Finally, everything on the platform is downloadable to integrate with one's existing patient medical record systems.

While the development of the platform has not been quick or easy, it has led me to consider the value of a tool like this in Pain medicine more broadly. Script Assist has been designed initially for doctors who, like me, want to prescribe cannabinoid medicines in their own private practices through the provision of governance with the confidence in products that had a certain level of evidence.

But such considerations are not exclusive to medical cannabis and do force us to consider the level of visibility, control and governance we could all do with prescribing any medicines to our patients in the entirety of our practice.

Ultimately, what I have helped create is my suggestion to

how we can safely prescribe medical cannabis within our existing practices. Please feel free to have a look at the platform and let me know what you think of it.

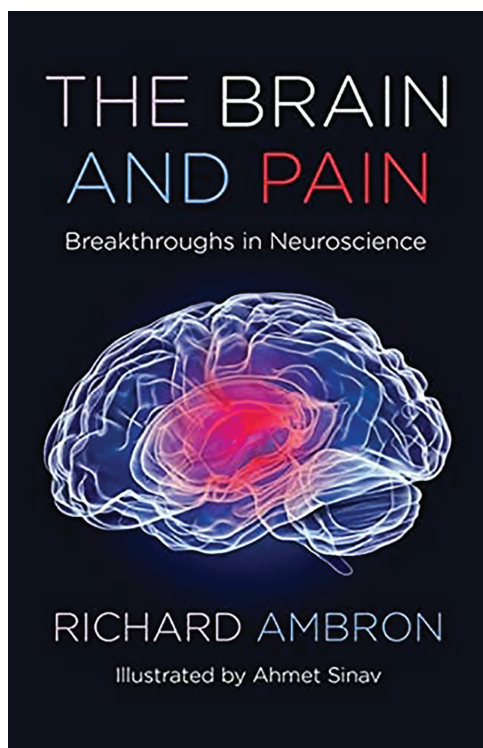
www.scriptassist.co.uk



References

1. NICE. Cannabis-based medicinal products, 2019. Available online at <https://www.nice.org.uk/guidance/ng144/chapter/recommendations#chronic-pain>
2. Aviram J, Pud D, Gershoni T, et al. Medical cannabis treatment for chronic pain: outcomes and prediction of response. *European Journal of Pain* 2020; 25(2): 359–74.
3. Hill KP, Palastro MD, Johnson B, et al. Cannabis and pain: a clinical review. *Cannabis and Cannabinoid Research* 2017; 2(1): 96–104.
4. Haleem R and Wright R. A scoping review on clinical trials of pain reduction with cannabis administration in adults. *Journal of Clinical Medicine Research* 2020; 12(6): 344–51.
5. Webb CW and Webb SM. Therapeutic benefits of cannabis: a patient survey. *Hawai'i Journal of Medicine & Public Health* 2014; 73(4): 109–11.
6. Ware MA, Wang T, Shapiro S, et al. Smoked cannabis for chronic neuropathic pain: a randomized controlled trial. *Canadian Medical Association Journal* 2010; 182(14): E694–701.
7. Habib G and Artul S. Medical cannabis for the treatment of fibromyalgia. *Journal of Clinical Rheumatology* 2018; 24(5): 255–8.
8. Aviram J, Lewitus GM, Vysotski Y, et al. Prolonged medical cannabis treatment is associated with quality of life improvement and reduction of analgesic medication consumption in chronic pain patients. *Frontiers in Pharmacology* 2021; 12: 613805.
9. Russo EB. Cannabis and pain. *Pain Medicine* 2019; 20(11): 2083–5.

Pain and the Brain



The Brain and Pain: Breakthroughs in Neuroscience, edited by Richard Ambron; New York: Columbia University Press, 2022, ISBN-10: 0231204876.

Reviewed by Professor George Ikkos

Ambron directed a laboratory investigating the molecular basis of pain for 40 years and, before his retirement, he co-directed the clinical anatomy course of the College of Physicians and Surgeons at Columbia University. He is clearly a master of his subject and a gifted teacher. He works his way

from basic neuroanatomy and physiology all the way up from the peripheral and into the central nervous system with commendable clarity and in illuminating detail. His is a nuanced approach. For example, he explains that the number of different neurotransmitters regulating pain may reflect their somewhat different targets: for opioids, the prevention of pain following serious injury, for noradrenalin and serotonin the modulation of pain in response to mood alterations and, possibly, for the endogenous opioid anandamide, the down regulation of pain in the service of obtaining a reward. This last may be the mechanism through which high performing athletes overcome the pain barrier. The author also discusses the implications of the increasing understanding of the remarkable complexity of pain physiology for analgesic drug development and for other physical treatment methods.

A strength of the book is the attention it gives to the central psycho-neurophysiology of pain. It discusses both ascending and descending modulating pathways, their neurochemistry, and the impact of psychological factors. Of interest is the discussion of reduction of pain through analgesics, placebo and meditation and the distinct neurophysiological mechanisms that underly each one of them. I was surprised to read about the different physiological mechanisms that appear to underly response to pain in masochism and also in religious martyrdom. Ambron is an enthusiast for meditation and explains the science that motivates his position. The final chapter offers a brief general introduction to pain management.

For a wide range of clinicians, Ambron offers an excellent introduction to the clinical neuroscience of brain and pain, including their relation to emotional and other psychological factors. Particularly helpful are the carefully chosen, simple and clearly designed black and white illustrations by Ahmet Sinav. They clarify and reinforce the text.

The meeting



Portrait of a Married Couple. Anthony van Dyck 1617–1618.
Budapest Museum of Fine Arts, Budapest, Hungary

It was the first time I had been inside Wendy's new house; up until now, I had just driven up her small cul-de-sac and said a quick hello at the door when I was dropping off or picking up one of the children. This evening, I was invited to sit in an alcove off the kitchen bathed in light from the floor length windows on three sides. Wendy indicated a wicker chair, a chair that had previously resided in the garden room of the house Wendy and I had shared when we were married.

Wendy left me there for a few minutes. She returned and placed a cup of coffee on a coaster in front of me along with a plate of biscuits. The closeness and familiarity of the situation brought some confusing emotions for me. The most notable of which was a sense of something good that had been lost. There was a gentleness and vulnerability in Wendy this evening in contrast to our encounters over the last few years which had mainly been marked by coldness and confrontation. I could see that she was very nervous, as was I.

Wendy produced a folder from which she pulled out a sheaf of maybe six A4 sheets, both sides of each sheet covered in her distinctive handwriting, bold and legible but with an almost childlike script. In my pocket was my own aide memoire, a folded scrap inscribed with a number of bullet points.

'Right then', she said, her voice shaky and uncertain. 'Shall I go first?'

My affair with Julie, a married women with two children of her own, had shocked and scandalised my family, our friends and the church we both belonged to. I had left Wendy and our two teenage children to move to a rented house, and a week later, I was sat outside Julie's house in the car while she carried bags and cases full of her stuff to load into the boot. She didn't want me to get out of the car and help for fear of incensing her husband. Our decision to both leave our respective spouses had been agonised over for months. The affair was being conducted in secret, and we wanted to end the deceit. At the time, neither of us could see a better way of ending our marriages and being together than to tear the plaster off and move in together. We had no illusions about how our actions would be perceived, and we desperately hoped our children would be able to forgive us for disrupting their security and quickly adjust to the new arrangements. From the car window I watched Julie force herself away from a tearful doorstep goodbye with her two and promised them that she would see them in a few days when they could come and stay with us.

The divorce was bitter. Wendy and I agreed we should try and be civil and fair, and with this in mind, we opted for a collaborative divorce. In the spirit of collaboration, I chose a lawyer who came across as reasonable and fair-minded, but I was outmanoeuvred by Wendy who chose a lawyer who was, frankly, ruthless. In the collaborative meetings, the four of us around a table, Wendy's lawyer, with digs and asides, took every opportunity to drive home the pain and sense of loss I had caused Wendy. It took me a while, but I eventually realised that this was a tactic of Wendy's lawyer who would ultimately judge her success on what she could 'win' for Wendy. I wanted to feel I had been honourable and gracious in the division of our shared assets, so I put up little resistance. It was a humiliating experience and, I reasoned, no more than I deserved.

Once the divorce was done and dusted, shared house sold, assets divided, Wendy and I began to tentatively rebuild some sort of friendship. We talked about the children on the phone, we occasionally saw each other at social functions and we chatted for a few minutes at these occasions. I would ask about her parents and family, who I missed, but my

The meeting

relationship with them was one of the casualties of our divorce. Wendy would ask about how things were going at the surgery where I worked as a GP. These conversations were awkward – for my part, I was wary, not wanting to open old wounds and expose myself to the sting of a barbed comment. In Wendy, I sensed the same wariness and a determination to not be hurt by me again.

But it all changed around 12 months after the divorce when, at one of these social functions, Wendy handed me a book and asked if I would read it – ‘The book of forgiving’ by Archbishop Tutu and his daughter Mpho – based on lessons learned and examples from the Truth and Reconciliation Commission in South Africa. Examples were given of the victims of violent or sexual assault meeting their assailant or of the bereaved meeting their loved one’s murderer. At these meetings, the victim would try and describe the pain and suffering they had experienced and how their lives had been ruined. The perpetrators would listen and then would describe their lives leading up to the crime. The book was filled with descriptions of the healing power of these meetings for both victims and assailants.

Wendy told me she had been having counselling, and she had come to see that the failure of our marriage was a two-way thing. Her counsellor had given her the book to read and gently proposed that Wendy and I might seek a reconciliation.

Wendy suggested we follow the example in the book. Each explain to the other the hurt we have caused through our marriage and in the aftermath. One listening and not interrupting while the other explains. At the end, we each acknowledge the hurt the other has suffered and then ask for

and, in turn, receive forgiveness.

I read the book, and we met as Wendy suggested. Reading from her prepared A4 sheets, Wendy began hesitantly. She explained that she had not wanted the marriage to end. She would have tried to forgive me if I had ended the relationship with Julie and come back. She said that after I left, she had become despairing to the point of booking herself into a hotel near Beachy Head with the intention of ending her life. Annie, our daughter, had found out her intentions and put a stop to it. I found this almost unbearable to hear. Wendy then apologised for her perceived failings as a wife and asked me to forgive her for being controlling and for belittling me by not taking into account my opinions and feelings through our marriage. I was humbled by the courage it must have taken for Wendy to lay herself bare in that way. As she spoke, I realised I wouldn’t need to detail what I felt was wrong with our marriage – Wendy’s apology had covered most of it. And at my turn, I found that what I needed to do was to acknowledge her pain and to apologise for the hurt I had caused her and for wrecking her perceived future. The meeting was possibly the most powerful and moving experience of my life. At the finish, we were both tearful, and as we embraced, I felt a profound feeling come over me – a feeling of the slate being wiped clear and of my sins being washed away.

Another 8 years have now passed. There are still some members of my family, some old friends and members of the church who cannot bring themselves to talk to me if we happen to meet. But I am reconciled to Wendy and we are friends and I still wonder at her courage and the grace she showed me in paving the way for the meeting.

TIME IS
PRECIOUS

THINK
OUTSIDE
THE BAG

Who has time
for buffering,
dilution and
slow-infusion?

- No reconstitution
- No buffering
- No dilution
- No slow infusion
- Reaches C_{max} in 3 minutes¹



Akis[®]
diclofenac sodium 75 mg/1 mL
solution for injection

READY WHEN YOU ARE

Intravenous bolus injection for treatment,
or prevention, of postoperative pain
in hospital settings

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PRESCRIBING INFORMATION: Please refer to Summary of Product Characteristics before prescribing. **ACTIVE INGREDIENT:** Each 1 mL ampoule contains 75 mg diclofenac sodium. **INDICATIONS:** By intravenous bolus injection for treatment, or prevention, of post-operative pain in hospital settings. By intramuscular and subcutaneous injection in acute forms of pain, including renal colic, exacerbations of osteo- and rheumatoid arthritis, acute back pain, acute gout, acute trauma and fractures, and post-operative pain. **DOSAGE AND ADMINISTRATION:** Adults: by intramuscular, subcutaneous or intravenous bolus injection. Not to be given by i.v. infusion. Use the lowest effective dose for the shortest duration necessary. For severe pain a dose of 75mg may be needed. Exceptionally, and in severe cases, a second dose of 75mg can be administered after 4-6 hours. Lower doses may suffice for mild and moderate pain, where freedom from the usual side-effects of NSAIDs is a priority and in the elderly particularly if frail or underweight. Maximum daily dose 150mg. Maximum treatment duration two days. **Elderly:** Maximum daily dose 150mg. Monitor regularly for GI bleeding. **Children and adolescents:** Not recommended. **CONTRAINDICATIONS:** Haemostasis disorders or current anticoagulant treatment (i.m. use only), hypersensitivity to active substance or excipients, active gastric or intestinal ulcer, bleeding or perforation, historic NSAID-related gastrointestinal bleeding or perforation, active or history of recurrent peptic ulcer/haemorrhage, last trimester of pregnancy, severe hepatic, renal or cardiac failure, history of NSAID or acetylsalicylic acid precipitated asthma, urticaria, or acute rhinitis, established congestive heart failure, ischemic heart disease, peripheral arterial disease and/or cerebrovascular disease. **Specifically for i.v. use:** Concomitant NSAID or anticoagulant use (including low dose heparin), history of haemorrhagic diathesis or asthma, history of confirmed or suspected cerebrovascular bleeding, operations associated with high risk of haemorrhage, moderate or severe renal impairment, any cause of hypovolaemia or dehydration. **SPECIAL WARNINGS AND PRECAUTIONS FOR USE:** Avoid use with systemic NSAIDs or COX-2 inhibitors. Caution in the elderly particularly if frail or underweight. Monitor for anaphylactic/anaphylactoid reactions and signs and symptoms of infection. Adhere to instructions for intramuscular injection to avoid adverse events at injection site including injection site necrosis and embolia cutis medicamentosa (Nicolau syndrome). Caution and close medical surveillance with symptoms indicative of gastrointestinal disorders or with a history suggestive of gastric or intestinal ulceration, bleeding

or perforation. Consider combination therapy with protective agents for these patients and those requiring concomitant medications likely to increase gastrointestinal risk. Discontinue immediately if gastrointestinal bleeding or ulceration occurs or at first appearance of skin rash, mucosal lesions, or other signs of hypersensitivity. Close medical surveillance and caution in patients with ulcerative colitis, Crohn's disease, after gastro-intestinal surgery, impaired hepatic function, hepatic porphyria, impaired cardiac or renal function, history of hypertension, the elderly, patients receiving concomitant treatment with diuretics or medicinal products that can significantly impact renal function and patients with substantial extracellular volume depletion from any cause. Monitor for fluid retention and oedema in patients with history of hypertension and/or mild to moderate congestive heart failure. Caution in patients with significant risk factors for cardiovascular events (e.g. hypertension, hyperlipidaemia, diabetes mellitus, smoking). Careful monitoring in patients with defects of haemostasis. Monitor haemoglobin and haematocrit levels if symptoms of anaemia are detected. Risk of hyperkalaemia in diabetic patients or those taking potassium-sparing drugs. Special precaution recommended in patients with asthma, seasonal allergic rhinitis, swelling of the nasal mucosa, COPD, chronic infections of the respiratory tract, and patients allergic to other substances. Increased risk of aseptic meningitis in patients with SLE and mixed connective tissue disorders. **INTERACTIONS:** Lithium, digoxin, diuretics, ACE inhibitors, angiotensin-II antagonists, other NSAIDs, corticosteroids and acetylsalicylic acid, anticoagulants and heparin (administered in the elderly or at curative doses), thrombolytics and anti-platelet agents, SSRIs, antidiabetics, methotrexate, pemetrexed in patients with normal renal function, calcineurin inhibitors (e.g. ciclosporin, tacrolimus), deferasirox, quinolone antibacterials, phenytoin, colestipol and cholestyramine, potent CYP2C9 inhibitors, (e.g. sulfapyrazone and voriconazole), mifepristone, tacrolimus, zidovudine. **PREGNANCY, LACTATION AND FERTILITY:** Avoid during first and second trimester of pregnancy unless clearly necessary. Consider antenatal monitoring for oligohydramnios resulting from foetal renal dysfunction and ductus arteriosus constriction after exposure to diclofenac for several days from week 20 onward; discontinue if found. Contraindicated during the third trimester of pregnancy. Not be administered during lactation. May impair female fertility. **DRIVING:** May cause visual disturbances, dizziness, vertigo, somnolence or other central nervous system disturbances. Driving or use of machines

should be avoided if affected. **UNDESIRABLE EFFECTS:** AKIS Post-marketing experience: Very common: injection site reactions. Common: nausea, limb discomfort. Serious: hypersensitivity reaction, ischaemic colitis, Nicolau syndrome. **NSAID class effects:** Common: headache, dizziness, vertigo, nausea, vomiting, diarrhoea, dyspepsia, abdominal pain, flatulence, transaminases increased, rash, injection site reaction, injection site pain, injection site induration. Serious: Thrombocytopenia, leukopenia, anaemia (including haemolytic and aplastic anaemia), agranulocytosis, anaphylactic and anaphylactoid reactions, psychotic disorder, convulsion, aseptic meningitis, cerebrovascular accident, cardiac failure, myocardial infarction, Kounis syndrome, hypertension, vasculitis, asthma, pneumonitis, gastrointestinal haemorrhage, haematemesis, diarrhoea haemorrhagic, melaena, gastrointestinal ulcer, colitis (including haemorrhagic colitis and exacerbation of ulcerative colitis or Crohn's disease), stomatitis, diaphragm-like intestinal strictures, pancreatitis, hepatitis, hepatic necrosis, hepatic failure, bullous eruptions, erythema multiforme, Stevens-Johnson syndrome, toxic epidermal necrolysis (Lyell's syndrome), acute renal failure, haematuria, proteinuria, nephrotic syndrome, interstitial nephritis, renal papillary necrosis. Prescribers should consult the summary of product characteristics in relation to other adverse reactions. **PHARMACEUTICAL PRECAUTIONS:** Store below 25°C. Do not refrigerate or freeze. Store in the original packaging to protect from light. Do not use if crystals or precipitates are observed. **DATE OF REVISION OF PRESCRIBING INFORMATION:** March 2023 **LEGAL CATEGORY:** POM. **BASIC NHS PRICE:** £24.00 (5x75mg/1 mL ampoules). **MARKETING AUTHORISATION HOLDER:** IBISA Farmaceutici Italia Srl, Via Martiri di Cefalonia 2, 26900 Lodi (Italy).

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