Learning outcomes

By the end of Module 3 the learner should be able to:

- List the International Association for the Study of Pain (IASP) clinical diagnostic criteria for complex regional pain syndrome (CRPS)
- Have an overview of the initial management of CRPS and be aware of the Royal College of Physicians' 2018 guidance on CRPS
- Understand the role of the multi-disciplinary team in pain management
- Be able to describe the structure and function of the autonomic nervous system
- Be aware of the more interventional treatments for CRPS including spinal cord stimulators and lumbar sympathetic blocks
- Know the sources of professional support

Trainer information

Module 3 uses the fictional character, Miss Abby Lewis, a lady with CRPS, to introduce some important concepts to the learner. The module allows interactive progression of the case with several alternative outcomes. The alternative narratives provide equivalent learning opportunities to the learner.

Case study

The background is introduced including the existence of a recent British Journal of Anaesthesia review on the diagnosis and management of CRPS.

The learner is given the background of the patient's original injury and initial management in the form of a patient narrative. They then review the referral of the patient to the pain service from out of area having already attempted some forms of treatment. This allows the storyline to introduce the more interventional aspects of management after standard pain management strategies have been unsuccessful.

The learner is given an audio recording of the MDT discussing the patient's referral into the service following which they are offered the opportunity to access more information on interventional approaches to managing CRPS. After this information is presented, they choose which intervention they think is most appropriate. This decision point is followed by a summary of the autonomic nervous system and then an audio recording of the patient in clinic. The learner is then prompted to discuss the case with their Faculty Tutor (Pain) or Clinical Supervisor if possible.

The patient in the first instance is managed by non-interventional means in this case before more interventional management is introduced as a viable option.

Due to the more emotive nature of this case sources of pastoral support are flagged to the learner and the importance of seeking support when confronted with things that challenge them.

The case is completed with a further patient narrative on their outcome following different interventional and non-interventional forms of management.

Trainer information - discussion

Discussion of the case should develop naturally according to the individual's learning needs in a similar fashion to a CbD in a clinical setting. The learner should be encouraged to develop their own professional judgment according to required curriculum competence areas. The learner should be aware of these as they are stated at the start and on completion of each Module.

Other points for discussion could include:

- The clinical diagnostic criteria for complex regional pain syndrome (CRPS)
- The initial management of CRPS and the national guidance on CRPS
- The role of the multi-disciplinary team in pain management
- The structure and function of the autonomic nervous system
- Some of the interventional treatments for CRPS including spinal cord stimulators and lumbar sympathetic blocks
- Chat about the importance of professional support and wellbeing resources available locally and nationally

Appendix 1: Module 3 transcript 1- MDT

Melanie (psychologist): *Thanks for standing in for me and presenting Abby to the meeting. Sorry I'm late everyone. This is Morgan our new psychology student who's with the department for four months, shall we just go round the room quickly and introduce ourselves?*

James Jones (Pain consultant): *I'm James Jones, the consultant and this is my colleague another trainee. Welcome to the pain service.*

Graham (physiotherapist): *I'm Graham one of the physios and this is Diane and Ruth our fantastic OT and specialist nurse.*

James Jones: *So, what does everyone think of Miss Lewis?*

Melanie: *I get the impression from the referral that she's at the end of her tether and believes that her only way out of the current situation is to get rid of her leg.*

Graham: *That's a bit extreme though. We can't promise her that it will solve the situation. I've read about a couple of cases where the patient gets CRPS in their stump and can't wear a prosthesis. That's extremely debilitating.*

James Jones: *Well I agree that it should be a last resort. It's certainly too soon to be seriously considering it.*

Melanie: *But we need to engage with her, I think it would be really useful if she felt that it wasn't off the table as an option. I think that would help motivate her to try some other things.*

Graham: *Why didn't she carry on with the mirror therapy?*

Melanie: *It's not clear from the referral.*

Graham: *Well why don't we try and get her pain under better control to facilitate physiotherapy and I can suggest we reintroduce that? I really don't think we should be considering offering to amputate in such a young patient when she hasn't exhausted all other alternatives. If she ran races before she'll have experience of setting goals and working towards them. We need to be able to tap into that.*

James Jones: *Well there are a few options she hasn't tried yet that we can trial for improving her pain control. I've done a course of low dose ketamine infusions for this kind of patient before. Either that or lidocaine infusions. But they're not a good long-term solution. The same regarding sympathetic lumbar blocks. But in the short term it may be what she needs to facilitate physiotherapy.*

Melanie: *I think it would be a good idea if I assessed her. I wouldn't be surprised if she's struggling to cope given her lack of motivation and interest in things. I could work with her using acceptance and commitment therapy to help her come to terms with her situation and engage with us. We can try and unpick this compulsion to be rid of her limb so early in the disease course because it could*

be part of a CRPS related body-dysmorphia rather than a considered objective decision.

Graham: *What about a spinal cord stimulator? Could we refer her for assessment?*

James Jones: *Well it is an option and I'd rather we considered everything else before we even think about amputation. But we don't do it here, so I'd have to refer her one of the regional centres and then she'd have to be assessed, have a successful trial, and then get the device. And the results are variable. I've seen people who benefit greatly from the devices, but others feel like they've been through the process for nothing. That's why the assessment for these things is so rigorous. It isn't an easy or rapid solution to the problem.*

Melanie: *There isn't an easy or rapid solution.*

James Jones: *Granted, there isn't. We all know from experience that an integrated multidisciplinary approach with patient education, physio and OT, psychological interventions and pain relief are the pillars of treatment for these patients.*

Melanie: *But we have to navigate managing a patient who is disengaged with the idea that these other things offer any benefit and is fixated on the idea that an amputation is the answer.*

Dr Jones: *What do you think?*

Module 3 transcript 2 - Abby

This all feels quite shocking still to be honest. It's been nine months since my accident and I really struggle with this being me. I was so different before.

I knew something wasn't right within a couple of days of having my ankle fixed. It felt like my skin was on-fire and the burning pain was through the roof. In felt like my skin was too tight. The orthopaedic doctors said I might have compartment syndrome and took my plaster off but it wasn't that. Then they said it was clot and sent me for an ultrasound. But no clot so they started me on antibiotics because they thought I had an infection. I had more scans and they're telling me its not an infection and I could stop the antibiotics.

Then the orthopaedic consultant is telling me that we've ruled out all these things like it's good news. But I could hardly walk by then and wasn't sleeping, so for me not getting an answer, something they could fix, that was about as far from good news as he could get. He asked me if I'd heard of CRPS and said he was sending me to some pain service people who could 'manage' it.

The pain service before were all nice people, I think it could have helped, but I was struggling to function because of my leg and I just couldn't see how anything they were suggesting was going to help. I work freelance and none of my contracts were renewed, I can't put weight on my foot so I can't drive, I wasn't even able to get round the supermarket. My parents offered for me to go back to them because I wasn't coping. It feels bad to be sleeping in the room you had as a kid with the same my little pony wallpaper.

I took everything the GP and the pain people told me to take, they even gave me some patches that are meant to be good and I just spend the whole time feeling half asleep. But the pain is still there, a constant burning pain that takes up all the space in my life.

I have to drag this swollen, stiff, leg round that doesn't even feel like it belongs to me and I can't move it the way I want to, it's not the pain, it just feels like I'm not in control of it. When I'm boiling it might be freezing and blue, if I'm cold it can be red and hot. Even the toenails have gone all brittle and the skin is shiny and thin. I can't even put moisturiser on it because I can't bear to touch it. Even the lightest touch hurts. And I don't use it, so all the muscle I had in my legs from running is just gone.

I'm sick of it ruining my life. I want to be rid of it. I know that you can do that for this CRPS thing. I looked it up online and there are lots of people who have got rid of their leg and are much better after. That guy in that Paralympics a couple of years ago had CRPS before and now he's got blades and wins medals. I'm stuck at my parents' house with no job, no life, and My Little Pony wallpaper to stare at, so you've got to help me do this.