

Learning outcomes

By the end of Module 2 the learner should be able to:

- Be aware of serious complications associated with sickle cell disease
- Understand some of the issues people with sickle cell disease experience when accessing care
- Consider alternative appropriate methods of pharmacological management of acute pain episodes
- Be aware of the NICE guidelines on sickle cell disease
- Have an overview of opioid receptors
- Understand the risks associated with multiple rib-fractures including risk scoring tools
- Outline the alternative methods of acute pain control for an individual with multiple rib fractures including regional techniques

Trainer information

Module 2 uses two fictional characters, Daniel Kaine, a man with sickle cell disease who has been admitted with an acute pain episode and Charles Bude a gentleman who has multiple rib fractures, 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 studies

The learner is taking part in a fictional acute pain round and the first patient with a sickle cell acute pain episode is introduced including the existence of NICE guidelines relating to the management of sickle cell disease.

The learner can then ask the patient questions about how he is and his history. Responses are given as audio recordings (see appendix 1 for transcript). They are then invited to make a management plan for the patient.

At this point an optional area of progression of the case includes information on opioid receptors.

The learner is then 'bleeped' about the acute admission of an individual with multiple unilateral rib fractures. They are made aware of a recent BJA education article on the management of rib fractures and offered a summary of the article.

The case is then progressed by choosing from alternative management options. If an inappropriate management plan is made the case evolves so that this is clear and more suitable possibilities are then available to the learner.

The case is completed after ten MCQ on the topics covered in the module.

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:

- What are the complications associated with sickle cell disease?
- What pharmacological analgesia management options are there for acute pain episodes related to sickle cell disease?
- What issues might affect a patient who presents to hospital with frequent episodes of pain related to sickle cell disease? How might they feel?
- What are the major subtypes of opioid receptors? Can you remember where they are distributed within the body?
- What are the risks associated with multiple rib-fractures?
- What regional techniques might you consider for pain control for an individual with multiple rib fractures?

Appendix 1: Module 2 transcript - Daniel Kaine

Ask him to tell you about his pain

I'll get this sort of ache in my leg bones and arm bones, in my joints, in my elbows and knees, and this feeling that my energy has just drained out of me. Then I'll just know it's flaring up again. It's been happening as long as I can remember. When I was a little kid it used to be my hands and feet, they'd swell up during an episode. While my mates were all out on their bikes down the park I was stuck in hospital.

Once it's started it ramps up pretty quickly. There's this constant ache and then on top of that it's like my bones are being sawed from the inside out, like I'm being constantly stabbed. People keep asking me how many out of ten but it's so far off the scale of zero to ten. It's really hard to get through to people how bad it is.

It usually gets worse over a day or so and then takes five or so days before it turns a corner and gets better. At its worst I can't walk. I can't do stuff for myself. It's really hard because on the outside I look like I'm completely ok and people don't take my pain seriously.

Ask him what he's tried at home

I make sure I avoid stuff that triggers it. That flight didn't help this time. I ended up tired and stressed. It was cold on the plane and I guess I didn't get enough to drink either because we were stuck in the airport so long.

I always follow the plan Dr Houston and me worked out together. I have rescue meds at home and I take them at the start of an episode. Like this time I was taking Paracetamol, Ibuprofen and Oxycodone. I use a heat pad as well and try to rest but sometimes all that's just not enough and it gets away from me and I have to come into the hospital. By the time I'm admitting to myself I can't cope with it at home anymore, I'm so done. People don't get that. I'm having to try and explain what I need while I'm just completely done.

Ask him what worked last time

People don't always trust me to know what works. I haven't had great experiences in some places. Like constantly having to wait and there's this suspicion that I look ok so I must be an addict, like I'm here to score drugs. Knowing what works and asking for a specific drug and you get that suspicion. I'm not addicted to morphine, I'm addicted to not being in excruciating pain. And I can't even defend myself because you get a reputation as a difficult patient, which just makes it worse.

Sometimes I feel like I'm held to ransom and have to take the less effective drugs first to 'prove' that I need the stuff I need. Even when I show people my care plan sometimes I get

'well let's try this first and see how you get on'. Staff treat me differently to people with other reasons for serious pain. It would be easier if I'd been in a car crash and the bone was sticking out of my leg because people would get that, they would see it and think 'wow that guy is in a whole world of pain' and give you something. I'm in that level of pain but because I can't show people they don't get it.

It isn't a laugh. Every time I leave, I have to rebuild my life. I have to live with a constant state of limbo, never knowing when the pain is going to take over and you have to put everything on hold again.

I've had some good experiences, Dr Houston and Sandra my specialist nurse are great, they always come up to the ward when I'm in to make sure that my plan is working for me this time, and that it's actually happening. They talk to people who don't get it and try and get them to understand. The thing is that most people don't know much about sickle cell. I've been on wards where most of the staff haven't even heard of it. I just wish people would listen, listen and actually hear what I'm saying. It would make everything so much easier and make me feel like we were all on the same side.