**Case Study - Chronic Pain Phantom limb pain**

ILOS Pathophysiology of phantom limb pain. Stump pain, phantom sensation and phantom pain. Management strategies, medications, SCS, surgery, prosthesis.

**Mr Smith is a 64 year old man with poorly-controlled diabetes, who had a right sided below knee amputation 1 month ago, due to gangrene in his right foot. He complains of ongoing right leg pain.**

**How would you manage his pain using the RAT approach?**

**Recognise:**

* Patient may have pain in the stump, phantom pain/sensations or a combination
* He may have a poor understanding of his symptoms

**Assess:**

* Severity
  + May be severe
  + How is it affecting him?
* Type
  + Acute or acute on chronic
  + non-cancer
  + neuropathic – nerve damage causing stump pain (?neuroma) or phantom pain
  + nociceptive - stump infection, trauma
  + Mixture of neuropathic and nociceptive
* Other factors
  + Physical
    - role of prosthesis
    - Infection, control of diabetes
    - Role for surgery eg excision of neuroma or revision on stump
  + Psychological
    - Change of identity, lifestyle, function, ability to work and participate in hobbies

**Treat:**

* Non-pharmacological
  + Likely to be very important, particularly if there is no remediable cause and this is likely to be chronic pain
  + Explanation of cause and access to psychologist if possible
  + Use of prosthesis may help phantom symptoms and physiotherapy
* Pharmacological
  + Nociceptive
    - treatment of underlying cause – infection, prosthesis review
    - Paracetamol, anti-inflammatories

Neuropathic

* + - Amitriptyline nocte especially if not sleeping
    - Alternative agents: nortriptyline, duloxetine, gabapentin, pregabalin
      * how to choose, benefits and disadvantages of each

Topical agents – capsaicin, Versatis, Qutenza

* + - Not opioids
      * why not?
    - Spinal cord stimulation
      * Mechanism of action
      * Pros and cons

**Additional possible discussion points:**

* Risk factors for post-surgical chronic pain
* Prevention of chronic post-surgical pain
* Management of peri-operative pain in amputation
  + Systemic analgesia
    - WHO pain ladder and anti-neuropathics
  + Regional
    - spinal, epidural, nerve blocks or catheters
  + Local anaesthesia
    - Infiltration or would catheter