**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