Anti-neuropathic Pain Medications Fact Sheet

Group 2: Anti-neuropathic medications

These medications are also known as co-analgesics[1] and can be prescribed for nerve-related (neuropathic) pain. These medications are often prescribed if you have burning or shooting pain (nerve injury or 'neuropathic pain')[2].

Anti-neuropathic medicines can help to reduce or "calm down" nerve activity and reduce pain hypersensitivity associated with conditions like shingles, diabetic pain, sciatica, fibromyalgia and headaches.

Based on current evidence they help approximately 1 out of 6-7 people with neuropathic pain[2]. They don't tend to help usual acute nociceptive pain or inflammatory pain.

Tramadol is likely to help acute nociceptive pain, inflammatory pain, and neuropathic pain.

Tramadol works at 3 different receptor sites (Tramadol has weak Opioid with additional Nor-Adrenaline and Serotonergic actions). It is practically non-addictive (S4). Please see the further information in the Analgesic fact sheet.

Antidepressant pain-relievers

A 4 weeks trial (minimum) is needed to change pain as it takes time to adjust neurotransmitters in the nerve cells. However, the sleep effect is noticeable on the day you take them.

Tricyclic (TCAs): Non-addictive:
These may be useful for pain and sleep[2]

- Amitriptyline (Endep™) 10-30mg/day:
  - Start a low dose of one 10mg tablet at 6pm tea-time, as it takes 2-3 hours to work to help sleep, for three nights.
  - Then slowly increase by one tablet every 3rd night up to 30mg if you don't have side-effects
  - The antidepressant dose is 100-150mg, so no mood effect at low dose
- Nortryptyline (Allegron) 10-30mg; less sedating
- Trimipramine (Surmontil) 12.5-25mg; less sedating

Serotonin NorAdrenaline Reuptake Inhibitors (SNRI's): Non-addictive
These may be useful for pain, mood and sleep[2].

- Duloxetine (Cymbalta) 60mg/day. Start 30mg for 1-2 weeks at 8pm. Increase to 60mg if no side-effects for 4 to 8 week trial.
- Venlafaxine (Effexor) 75mg/day. Start 37.5mg for 1-2 weeks at 8pm. Increase to 150mg if no side-effects for 4 to 8 week trial. Wide dose range for pain from 75 to 300mg/day.

Remember - Some people find that mild side effects (such as dry mouth, blurred vision, or drowsiness) improve the longer they take the medicine.

Anti-Epilepsy drugs:

- Anti-Epilepsy drugs: Gabapentin (Neurontin™, Gantin™, Gabahexal™) or Pregabalin (Lyrica™) are medications which also be may be effective in treating nerve pain in about 1 in 6-7 patients[2], and fibromyalgia in 1 in 15 patients.
- Other epilepsy drugs are Carbamazepine (Tegretol™, Sodium Valproate (Epilim™ for Spinal Cord injury only).
- If Epilim or Tegretol are used, you will need to have tests performed every 6 months to monitor your blood count and liver function, to make sure you are not developing uncommon side effects of these medications.

Gabapentin and Pregabalin do not require this early monitoring and are commonly prescribed from state funded hospitals pain medicine units).

How can you release your body's own medicine chest to relieve pain?
1. Smile: Smiling releases many of our 'up' chemicals including serotonin. We are wired from childhood that smiling means happiness, so that if you smile (even if you aren't happy), the body releases our 'happy' chemicals.

2. TIP 1: If children or adolescents are in a 'grumpy' mood (and if feeding them hasn't helped), get them to smile (properly). It is then hard for them to return to the bad mood: smiling acts as a circuit breaker.

3. TIP 2: Serotonin is the chemical released from chocolate and milk drinks - smiling does it without the calories (kJ's). a. Exercise: This doesn't mean getting hot and sweaty. Just walking at your own pace outside doing your daily walk increases your serotonin and nor-adrenaline. Nor-Adrenaline makes you feel more robust and able to cope with stressors or issues. This is what the anti-depressants can also do – but you can help by doing it naturally

4. TIP 3: athletes do also get an 'opioid high', or 'runners high' in addition to the other chemicals. Studies have shown that this 'runners high' may not occur if you have chronic pain. So, do the level of exercise that is of benefit to you (not necessarily what others can do)

References

1. Schug SA, Goddard C. Recent advances in the pharmacological management of acute and chronic pain. *Ann Palliat Med* 2014; **3**(4): 263-75.
2. Finnerup NB, Attal N, Haroutounian S, et al. Pharmacotherapy for neuropathic pain in adults: a systematic review and meta-analysis. *Lancet neurology* 2015; **14**(2): 162-73.