Methadone can be a useful add-on therapy for managing neuropathic pain. Specialist input and tailored patient education can ensure it is safely used.

**Introduction**

Peter is a 57 year old male with metastatic non-small cell lung cancer. Lately he has been experiencing severe back pain as a result of his spinal metastases causing him significant distress and limiting his ability to mobilise. He has previously described his pain to you as stabbing and shooting sensations, you recognise this as neuropathic pain.

His current medications are:
- Oxycodone SR 80 mg BD
- Amitriptyline 10 mg nocte
- Pregabalin 300 mg BD
- Paracetamol 1 g QID
- Oxycodone IR 10-20 mg hourly PRN

You note that his doses of Oxycodone have escalated rapidly in the last month. Amitriptyline and pregabalin have provided limited relief.

**Using Methadone for Pain**

Peters’ wife presents to the pharmacy today with a new prescription for Methadone tablets 2.5mg BD. She reports Peter’s pain has not been improving despite the increasing oxycodone doses and he is in too much pain to attend the pharmacy today. She states she does not understand why he has been prescribed methadone by his palliative care specialist as she thought methadone was to help people recover from a heroin addiction.

Neuropathic pain only responds partially to opioids, and continuing to escalate the doses of oxycodone may not provide any additional benefit for Peter.

Methadone is an opioid analgesic that also has NMDA-receptor-channel blockade properties and so can be effective in neuropathic pain. Adjuvant low-dose methadone may assist with the management of neuropathic pain, and may also reduce overall opioid dose-escalation and reduce the risk of opioid-induced hyperalgesia.

Methadone is typically started at low, regular doses of 2.5-5 mg once or twice-daily and up-titrated as required, usually to maximum of 30 mg. Methadone has complex and variable pharmacokinetics, including a shorter duration of action for pain compared to its long half-life. It is not suitable for PRN dosing and should be taken only on a regular basis.

As methadone is commonly used as a treatment for opioid dependence, it is important to provide counselling to Peter’s wife on the role of methadone in his pain management.

**Resources**

- [Methadone](https://www.scottishpalliativecareguidelines.org/methadone) (Scottish Palliative Care Guidelines)
- [The Use of Very-Low-Dose Methadone for Palliative Pain Control and the Prevention of Opioid Hyperalgesia](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5797363/)

**For more information**

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