Tapentadol Dose Reduction Guidance for Primary Care Practitioners

Tapentadol is an opioid medication licensed for the relief of moderate to severe acute pain and severe chronic pain in adults[1,2]. It has a dual mechanism of action, exerting its analgesic effects through μ-opioid receptor (MOR) agonism and noradrenaline reuptake inhibition[3].

It is approved by the County Durham and Tees Valley APC as a 3rd line treatment for the relief of severe chronic pain in adults which can be adequately managed only with opioid analgesics AND in whom morphine and oxycodone has failed to provide adequate pain relief or is not tolerated. Tapentadol has an AMBER specialist initiation status and should only be prescribed on the recommendation of the pain service. For chronic pain team use and inpatient acute pain team use only.

Usual doses as per British National Formulary[4]:

Indication	Tapentadol form	Dose
Moderate to severe acute pain	20mg/ ml oral solution 50mg or 75mg immediate release tablet	Initially 50mg every 4-6 hours, adjusted according to response (on the first day of treatment an additional dose of 50mg may be taken 1 hour after the initial dose; maximum 700mg in the first 24 hours), maximum 600mg per day
Severe chronic pain	50mg, 100mg, 150mg 200mg or 250mg modified release tablet	Initially 50mg every 12 hours, adjusted according to response; maximum 500mg per day

If a patient has taken Tapentadol for longer than 4 weeks and a joint decision has been made with the patient to wean and stop Tapentadol, the dose should be reduced gradually to minimise the risk of withdrawal symptoms. Tapentadol withdrawal symptoms are thought to be due to Tapentadol's MOR activity. Studies show withdrawal symptoms tend to be minimal; this may be because Tapentadol has a lower binding affinity at the MOR than other opioids. Nevertheless the dose should be reduced gradually[5,6,7].

Each patient should have an individualised reduction plan which is flexible. The patient should be fully supported throughout the plan. If the patient experiences significant withdrawal symptoms, the dose can be reduced more slowly or the patient given a 'tapering holiday'.

Creating a reduction plan

- The dual mode of action of Tapentadol makes it difficult to convert to a different opioid, therefore wean as Tapentadol and do not switch to a different opioid.
- Calculate the patient's 24 hour dose of Tapentadol. The dose can then be reduced by 10% each week[8] . The tablet dose reductions are limited by the tablet strengths available, therefore the this 10% figure should be rounded to the nearest tablet strength available

Example 1: Patient X is prescribed Tapentadol MR 200mg BD

- *Total dose in 24 hours = 400mg*
- *10% of total dose = 40mg, rounded up to 50mg (nearest tablet strength)*
- *Plan to reduce by 50mg every week until stopped*

- For Tapentadol tablet doses of less than 400mg per day the dose will have to be reduced by 50mg each time – as this equates to significantly more than a 10% dose reduction, the time between reductions should be increased

Example 2:

- *Patient Y is prescribed Tapentadol MR 100mg BD*
- *Total dose in 24 hours = 200mg*
- *10% of total dose = 20mg – reduce by 20mg week ~ 50mg every 2 weeks*
- *Plan to reduce by 50mg every 2 weeks until stopped*

- For tablet doses of 75mg per day, the dose can be reduced to 50mg daily for a few weeks and then stopped

- For tablet doses of 50mg per day the dose can be stopped without tapering – if the patient experiences significant withdrawal symptoms they can be prescribed a tapering course of Tapentadol liquid

- If a patient is prescribed Tapentadol immediate release tablets or liquid **when required** they should be asked how much they normally take in a 24 hour period. The dose should then be reduced by 10% each week

Example 4:

- *Patient Z takes Tapentadol liquid 50mg four times a day*
- *Total dose in 24 hours = 200mg*
- *Reduce the dose by 20mg (10%) each week – for ease this can be rounded to 50mg every 2 weeks*
- *The patient may then decide to reduce the frequency of doses, for example 50mg TDS, then 50mg BD, then 50mg OD.*
- *Alternatively they may decide to reduce each dose first, for example 25mg OM, 25mg lunchtime, 50mg teatime, 50mg at night, then 25mg OM, 25mg lunchtime, 25mg teatime, 25mg at night and so on.*

Please note this is guidance only. Each patient is different and the plan needs to be tapered to the patient's needs.

References:
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