



Prescribing tip for information only

Opioid dose equivalencies

In partnership with PHE the Faculty of Pain Medicine (FPM) has produced a [web based resource](#) for patients and healthcare professionals to support the prescribing of opioid medicines for **chronic non-cancer pain**. One of the key messages from the FPM website is that;

For chronic non-cancer pain the risk of harm to patients increases substantially at doses above an oral morphine equivalent of 120mg/day, but there is no increased benefit

During 2017 and 2018 the Medicines Optimisation Team conducted practice based audits across both CCGs and identified almost 575 non-cancer patients being prescribed above the maximum recommended dose of 120mg morphine equivalent/day (MED). Feedback received from these audits revealed a need for information around dose equivalencies between the various opioids.

As comprehensive data is lacking and there is significant inter-individual variation, conversion factors between opioids are an approximate guide only. The following table collated from information from the FPM, BNF and MIMS summarises (and highlights the differences between), the approximate equi-analgesic potencies of the opioids in relation to the FPM recommended maximum of 120mg MED.

Drug	Equivalent dose to 120mg oral morphine		
	Faculty of Pain Medicine	BNF ¹	MIMS ²
Oral codeine	1200mg	1200mg	1200mg
Oral dihydrocodeine	1200mg	1200mg	1200mg
Oral tramadol	804mg	1200mg	1200mg
Oral hydromorphone	16mg	24mg	16mg-24mg
Oral pethidine	Not stated	Not stated	1200mg
Oral tapentadol	300mg	Not stated	Not stated
Oral oxycodone	60mg	79.2mg	60mg-80mg
Transdermal buprenorphine	52.5mcg (=126mg morphine)	52.5mcg (=126mg morphine)	52.5mcg
Transdermal fentanyl	33.3mcg	50mcg	cannot interpret safely

Recommendations

- Prescribers should be familiar with the equi-analgesic potencies of opioids in relation to the FPM recommended maximum dose of 120mg MED
- All patients with chronic non-cancer pain being prescribed above the FPM recommended maximum dose of 120mg MED should be reviewed periodically with a view to dose reduction

References:

1. British National Formulary. London: BMJ Group and Pharmaceutical Press; 76th edition. 2018. p. 24.
2. MIMS. 25th Nov 2015. Opioid Analgesics: Approximate Potency Equivalence with Oral Morphine. Retrieved from <https://www.mims.co.uk/opioid-analgesics-approximate-potency-equivalence-oral-morphine/pain/article/1146201>

To contact the Medicines Optimisation Team please phone 01772 214302