

FACTSHEET: OPIOID ROUTE SWITCHING

Switching a regular opioid to an alternative route may be considered in patients who are having issues with tolerability, absorption, swallowing or practical aspects of the existing route. Examples include:

- Patients on oral medications who are vomiting or nauseated
- Patients whose swallowing is deteriorating whilst on oral medications
- Patients with stable pain, who have issues with constipation on their existing PO/SC opioid
- Patients experiencing local skin irritation with patches or syringe drivers
- Patients finding the equipment and/or time constraints of syringe drivers burdensome
- Patients taking shorter acting opioids who have a history of previous substance misuse/addiction (use of longer acting opioids is preferable)

Switching route may often involve also changing the type and/or dose of the opioid, meaning that dose conversion guidance is necessary. It is recommended in the literature that a 25-50% dose reduction be made as a safety factor when switching between opioids to reduce the risk of toxicity. The Kirkwood Opioid Conversion Chart (MD62) has incorporated this safety factor, so further reductions are not routinely necessary if this tool is used (see Toolkit). There is inter-individual variability in drug metabolism and tolerance so clinical judgement should always be exercised, and further reduction considered if concern is present. Please be aware that the use of alternative conversion tools may not include the safety factor. If a patient is already exhibiting signs or symptoms of opioid toxicity a higher degree of caution is required when converting opioids and larger dose reductions may be required. For complex patients – please discuss with a member of The Kirkwood team on 01484 557910. This guidance does not include methadone.

Improving tolerance prior to switching route

It is important to consider other methods of improving tolerance prior to switching route. For example:

- If an oral opioid is causing milder side effects such as nausea or constipation – consider addition of an antiemetic or laxative in the first instance
- If a patient on a syringe driver is having issues with site reactions consider:
 - Increasing the volume of the diluent
 - Changing the type of diluent e.g. from WFI to 0.9% saline (if compatible)
 - Replacement of medications which may be causing the reaction – e.g. giving levomepromazine as a single SC daily dose rather than in the syringe driver
- For patients struggling with skin irritation with patches, consider changing brand as the irritation may be secondary to the adhesive not the drug

FOR FURTHER ADVICE

Please contact The Kirkwood 24 hour advice line on 01484 557910

Routes considered

Oral Modified Release (MR) Opioids – e.g. Morphine Sulphate MR and Oxycodone MR

Oral morphine remains first line for patients in the absence of swallowing or absorption issues (as per NICE guidance). Switching route may be appropriate in those who have a change in absorption, swallowing or severe constipation (despite optimisation of laxatives). Patients with reduced dexterity may also benefit from alternative routes of administration for ease of use.

Transdermal patches - e.g. Fentanyl and Buprenorphine

Transdermal opioid patches may be of benefit for those patients with stable pain who are unable to have oral medication for the reasons outlined above. Patches are less constipating than opioids via other routes. These preparations do however have longer half lives meaning that time to therapeutic level and time to be excreted is more prolonged than PO/SC options. There may therefore be a change in PRN opioid requirement in the crossover period depending on the circumstances. Some centres allow a 24hr washout period for transdermal Buprenorphine and a 12hr washout period for transdermal Fentanyl but no consensus exists. The Kirkwood guidance is based on the known pharmacology of the drugs and anecdotal experience of switching in practice.

Subcutaneous administration via syringe driver (CSCI) – e.g. Morphine sulphate, Oxycodone

Syringe drivers are of benefit for those with impaired absorption/swallowing, and for those who require medications which can only be delivered parenterally. As a general rule, opioids in syringe drivers will take 4-6 hours to reach a therapeutic level which is the basis for the timings suggested in the guidance overleaf.

Common/uncommon route switches

Switching between oral medications to syringe driver (and vice versa) and from oral medications to transdermal patch is more common in clinical practice. It is far less common to have a clinical situation where a transdermal patch is switched to a syringe driver. In a patient with a well-tolerated transdermal patch with a rapidly changing condition necessitating frequent opioid dose increases it is established clinical practice to continue the patch and up titrate opioids by addition of a syringe driver, rather than replacing the patch entirely. The guidance overleaf relates specifically to those patients who are not able to tolerate the transdermal patch and complete patch removal is necessary.

The table overleaf is a general guide based on common practice and the available evidence.

There is inter-individual variability in drug metabolism and tolerance so clinical judgement should always be exercised

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The column on the left (blue) indicates the starting drug route, the row on the top (purple) indicates the route to be switched to.

STARTING FROM ↓	SWITCHING TO →	ORAL MR OPIOID	TRANSDERMAL PATCH	SYRINGE DRIVER (CSCI)
ORAL MR OPIOID		Apply patch and take final dose of MR opioid at the same time	Start syringe driver 4-6 hours before next MR opioid dose is due	
TRANSDERMAL PATCH	Take patch off, then administer first dose of MR opioid 12-24hrs later*		If patch removal clinically necessary (e.g. allergy) remove patch, maintain with SC PRNs and start CSCI 12-24hrs after patch removal**	
SYRINGE DRIVER (CSCI)	Give first dose of MR opioid up to 4 hours after stopping the syringe driver***	For smaller opioid doses: Apply patch then stop syringe driver 12 hours later. For large opioid doses: Stepwise switch initially -i.e. replace half the syringe driver dose with the equivalent patch and if tolerated do the remainder of the switch after 2-3 days		

* Some centres allow a 24hr washout period for transdermal buprenorphine and a 12hr washout period for transdermal fentanyl. Clinical discretion is advised

**As per guidance on page 2 of this guideline, removal of well-tolerated transdermal patches to facilitate a change of route is uncommon

***Established clinical practice and published guidance varies. Kirkwood practice is to stop the syringe driver 4 hours prior to the first MR PO opioid dose as this may reduce the risk of toxicity symptoms during the crossover period. Clinical discretion is advised.