

Management of Patients with Parkinson's disease who are Nil By Mouth (NBM) or with Swallowing Difficulties

Specialist Advice

Contact pharmacist initially so medicine administration problems can be prevented before missed doses occur
Parkinsons Nurse Specialists (PNS) are generally available Mon-Fri as below:

- Dundee (Ninewells): Emily Tenbruck tel 01382 660111 ext 36063, mob:07825928275
E mail Emily.tenbruck@nhs.scot
Dundee (RVH): Gillian Finlay tel 01382 423140
E mail gillian.finlay@nhs.scot
- Perth: Lorna Gillies tel 01738473172
E mail lorna.gillies@nhs.scot
- Angus: Linda Patterson tel 01356 665024
E mail linda.patterson@nhs.scot

If PNS not available; other PNS can be contacted or contact patient's usual Parkinsons Doctor.

Other contacts:

MFE Acute Frailty Senior Doctor is available in Ninewells
8am-8pm Mon-Fri and 8am-5pm Sat/Sun
Neurology on call via bleep Mon-Fri 9am-5pm and switchboard OOH

Rotigotine patch (transdermal dopamine agonist)

Appropriate in patients with no available oral or nasogastric route. It can be started by the acute care team as per flow chart overleaf. Consider side effects: Dopamine agonists cause more neuro- psychiatric side-effects than levodopa. e.g. hallucinations and drowsiness.

There is an increased risk of delirium.

Dose conversions for rotigotine patches

For patients who usually take an oral dopamine agonist an equivalent dose can be calculated using table 2.

For dopamine agonist naïve patients, an initial dose of rotigotine 2 mg/24 hours regardless of the previous levodopa dose should be started (unless younger with no cognitive impairment).

The patient should then be monitored for response and side effects. Increase rotigotine in 2 mg steps after 24 hours depending on response. Contact pharmacist/ PD team if available before increasing dose.

Table 1. Dopamine agonist equivalent 24h doses

Pramipexole (salt content)	Pramipexole (base content)	Ropinirole	Rotigotine patch/24hrs*
Up to 375micrograms	Up to 260micrograms	Up to 2mg	2mg
750micrograms	520micrograms	4mg	4mg
1.5mg	1.05mg	6mg	6mg
2.25mg	1.57mg	8mg	8mg
3mg	2.1mg	12mg	10-12mg
3.75mg	2.62mg	18mg	14mg
4.5mg	3.15mg	24mg	Max 16mg

***Multiple patches may need to be applied to provide total dose, ensure ordered from pharmacy ASAP**

Apomorphine:

Apomorphine is a potent dopamine agonist and is usually prescribed for 16 hours a day. It is not related to morphine. It should not be stopped on admission and crucial in maintaining mobility/ swallow etc
It does not require supplementation with rotigotine patches in the scope of this guidance.
If a patient is admitted on apomorphine please contact the PD nurse specialist ASAP. If urgent advice is needed OOH there is a **24 hour Apo-go helpline** on 0808 196 4242

Table 2 (use thickened fluid for modified diet if appropriate)

Note *selegiline, rasagiline, amantadine and entacapone are not essential in acute situations and can be omitted.

Medicine*	Formulation	Recommendation
Co-Beneldopa (Madopar®) (Levodopa)	Dispersible Tablets	Continue, no change required
	Capsules	Use dispersible tablets same dose
	Modified Release Capsules	Convert to dispersible tablets, reduce dose by 50%
Co-Careldopa (Sinemet®) (Levodopa)	Tablets (normal release)	Continue current regimen, plain release tablets will disperse in water
	Modified Release Tablets	Convert to plain release tablets, reduce dose by 50%
Cocareldopa/ entacapone e.g. Stanek/ Sustravi/ Stalevo®	Tablets	Convert levodopa content to Co-beneldopa dispersible/co-careldopa normal release and see above
Ropinirole or Pramipexole (Dopamine Agonists (DA))	Tablets (plain release)	Calculate 24 hour dose and follow table 1
	Modified Release Tablets	Follow table 1

Surgical patients:

Levodopa and dopamine agonists should be continued throughout the peri-operative period (refer to <https://www.ukcpa-periophandbook.co.uk/medicine-monographs/c/parkinson-s-disease>). Other PD medication may interact with anaesthetics – contact anaesthetist for advice. If prolonged surgery expected or if oral route compromised post-op it may be worthwhile considering alternative routes pre-operatively. Please discuss with PNS/ Pharmacist.

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Use in conjunction with guidance on Page 1
Can the patient swallow their medications safely even with a small amount of water or food e.g. yoghurt?

YES

NO

Prescribe normal medication at exact times

Can the patient swallow liquids/ modified diet?

YES

NO

Follow table 2

NG tube successfully inserted

Consider urgent nasogastric tube (NG) insertion within 4 hours

NG tube not established / patient unlikely to tolerate NG tube (e.g. delirium/ dementia)/
Patient requires to be NBM (e.g. Perioperatively)

Patient normally on dopamine agonist (DA) only
-Use table 1 to convert oral DA dose to equivalent rotigotine patch

Patient normally on both DA and levodopa medicines
-Use table 1 to convert DA dose to equivalent rotigotine patch
-Add 2mg to rotigotine dose to replace levodopa part of regimen
Maximum dose of rotigotine is 16mg

Patient normally on Levodopa only
(Caution- check no previous adverse effects with DA)
-Prescribe 2mg rotigotine patch
-If PD control sub-optimal after 24 hours increase by 2mg (if possible seek advice)
-Consider starting at 4mg in younger patients with no cognitive impairment

Remember to tell the nursing staff about any medication changes