CLINICAL GUIDELINE

Parkinson's Disease (PD) – Nil by Mouth Guidance, Acute

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Lead Author:	Yasmin Al-Din
Approval Group:	Medicines Utilisation Subcommittee of ADTC

Important Note:

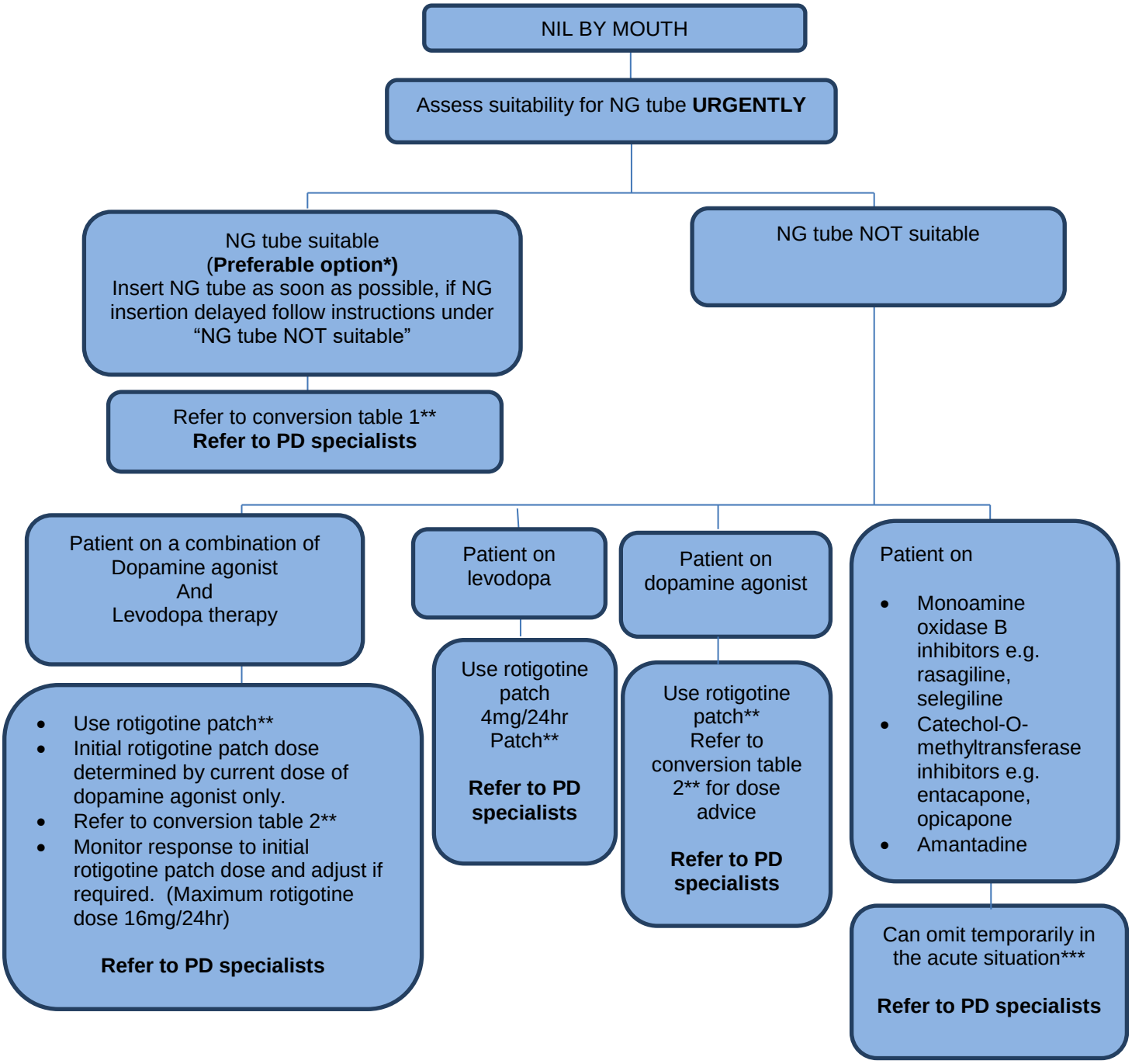
The Intranet version of this document is the only version that is maintained.
Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

NHSGGC Parkinson's disease (PD): management of PD patients who are nil by mouth

Guidance for converting oral PD medicines to an alternative formulation in the acute setting

Use GGC guideline ONLY as other guidelines and calculators may vary in the dose recommended

- During working hours (9am-5pm Monday-Friday) - Contact PD specialist immediately (See table 3 and 4 for contact details) and speech and language therapist (If patient has swallowing difficulties)
- During out of hours or if PD specialist not available, follow the guidance below. Notify PD specialist of PD patient admission (See table 3 and 4 for contact details)



***** NG tube is the preferable option due to risk of side-effects with rotigotine patch use and the suggested dose equivalence to rotigotine is only approximate.

**Check for cautions, contraindications and previous adverse effects to dopamine agonists. Monitor for side-effects or lack of benefit and adjust accordingly.

***Document in notes any medicines that are being temporarily omitted and make it clear these have to be restarted if/when swallowing is re-established.

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Administration of PD medicines to patients with enteral feeding tubes

The alteration of medications for use via enteral feeding tubes results in the medication being unlicensed.[1] Use 30ml of distilled water to flush the tube before and after drug administration. If more than one medication is to be given, flush with 10ml of distilled water between each one.[1,2]

With all changes to PD medication, close monitoring of the patient is needed.

Drug name	Method of administration for enteral tubes
Amantadine	• Liquid available 50mg / 5ml (contains sorbitol). • The capsules can be opened and contents mixed with water for administration.
Co-beneldopa (e.g. Madopar®)	• Modified release formulations **cannot** be crushed. • Dispersible tablets can be used. • A daily levodopa dose reduction of about 30% may be required when converting from modified release preparation to dispersible co-beneldopa. Smaller but more frequent doses may be required. • A small "when required" dose may need to be prescribed if changing from capsules/tablets to dispersible tablets. This should only be done by a PD specialist as there may be a detrimental effect of increasing total daily dose.
Co-careldopa (e.g. Sinemet®)	• Most standard release formulations do not disperse in water ***Exception:*** Sinemet® standard release disperses in water for administration • If other standard release brands are in use, switch to dispersible co-beneldopa ensuring the equivalent levodopa dose. E.g. Sinemet® 110mg (carbidopa 10mg/levodopa 100mg) tablet levodopa dose is equivalent to Madopar® 125mg (benserazide 25mg/levodopa 100mg) dispersible tablet • Modified release formulations **cannot** be crushed. Switch to dispersible co-beneldopa. A daily levodopa dose reduction of about 30% may be required when converting from modified release preparation to dispersible co-beneldopa. Smaller but more frequent doses may be required.
Entacapone and opicapone	• Can omit in the acute situation
Co-careldopa +Entacapone (e.g. Stanek®/ Stalevo®)	• Use separate components as follows: • Entacapone: Can omit in the acute situation • Co-careldopa: Refer to co-careldopa entry above.
Pramipexole	• Use rotigotine patch (refer to conversion table 2)
Pramipexole PR	• Use rotigotine patch (refer to conversion table 2)
Rasagiline (non-formulary)	• Tablets can be crushed and mixed with water for administration • Can omit in the acute situation
Ropinirole	• Use rotigotine patch (refer to conversion table 2)
Ropinirole XL	• Use rotigotine patch (refer to conversion table 2)
Selegiline	• Selegiline tablets can be dispersed in water • Can omit in the acute situation

Conversion table 1: Administration to patients with enteral feeding tubes [1-5]

Conversion of oral dopamine agonists to rotigotine patch

The maximum dose of rotigotine is 16mg/24hours. The Patches are available in 2mg/4mg/6mg/8mg strengths.
Do **NOT** cut patches to achieve correct dose.[3]

Pramipexole base content	Prolonged Release Pramipexole base content	Ropinirole	Modified Release Ropinirole	Rotigotine Patch
0.088mg tds (0.125mg tds salt content)	0.26mg/day (0.375mg/day salt content)	0.75mg tds	2mg/day	2mg/24hrs
0.18mg tds (0.25mg tds salt content)	0.52mg/day (0.75mg/day salt content)	1mg tds	4mg/day	4mg/24hrs
0.35mg tds (0.5mg tds salt content)	1.05mg/day (1.5mg/day salt content)	2mg tds	6mg/day	6mg/24hrs
0.53mg tds (0.75mg tds salt content)	1.57mg/day (2.25mg/day salt content)	3mg tds	8mg/day	8mg/24hrs
0.7mg tds (1mg tds salt content)	2.1mg/day (3mg/day salt content)	4mg tds	12mg/day	10-12mg/24hrs
0.88mg tds (1.25mg tds salt content)	2.62mg/day (3.75mg/day salt content)	6mg tds	16mg/day	14mg/24hrs
1.05mg tds (1.5mg tds salt content)	3.15mg/day (4.5mg/day salt content)	8mg tds	24mg/day	16mg/24hrs

Conversion table 2: Conversion of oral dopamine agonists to rotigotine patch[3, 5-10]

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Guidance for switching PD patients from rotigotine patch back to their usual oral PD medications once they can swallow medications safely

Once the patient can safely swallow their oral medication, consideration should be given to switching the patient back from rotigotine patch to their usual oral PD medication regimen.

In general terms, it is not recommended that the switch from rotigotine patch back to oral PD medication is carried out during out of hours. It is recommended that the switch is carried out during working hours with the support of a PD specialist.

Other PD non-oral medicines (not suitable for initiation in the emergency situation)

Subcutaneous Apomorphine (for infusion): This should only be instigated with the guidance of a prescriber experienced in PD (it is not suitable for emergency administration in a drug naïve patient). If a patient is already established on this then it must be continued. See NHSGGC Clinical Guideline Platform-Parkinson's disease, search for "Subcutaneous Apomorphine (for infusion)" for further information.

Co-careldopa intestinal gel (Duodopa®): This should only be instigated under the guidance of a PD specialist. It is not suitable in an emergency situation as it requires the insertion of a percutaneous endoscopic gastrostomy with jejunal (PEG-J) tube. If a patient is already established on this then it must be continued. See NHSGGC Clinical Guideline Platform-Parkinson's disease, search for "Duodopa Monograph for maintaining co-careldopa (Duodopa ®)" for further information.

Parkinson's disease specialist contact details

Inform PD nurse specialist of all PD admissions. Contact the PD nurse specialist for site as per contact details below. If PD specialist on your site is unavailable for advice, PD specialists from other sites can be contacted for advice.

Hospital site	Contact number	Bleep/mobile number
Gartnavel General Hospital	0141 211 3166	07855102326
Glasgow Royal Infirmary and Lightburn	0141 211 1522	13992 07949982628
Inverclyde Royal Hospital	01475 525 389	51196
Royal Alexandra Hospital	0141 314 6833	56617
Queen Elizabeth Institute of Neurological Sciences	0141 201 2590/2747	Not available
Queen Elizabeth University Hospital- Glasgow	0141 201 2440	07958702902 07855102326
Stobhill	0141 355 1480	11072
Vale of Leven	01475525389	51196
New Victoria Hospital	0141 347 8146/8144	Not available

Table 3: Parkinson's disease nurse specialist contact details

PLEASE NOTE: If PD nurse specialists are unavailable for advice, contact PD consultant specialist at your site for advice via secretary as per contact details below.

Hospital site	Contact number
Gartnavel General Hospital	0141 211 3166
Glasgow Royal Infirmary and Lightburn	0141 451 5348 0141 451 5351
Inverclyde Royal Hospital	01475 505078
Royal Alexandra Hospital	0141 314 6678
Queen Elizabeth Institute of Neurological Sciences	0141 201 2478
Queen Elizabeth University Hospital- Glasgow	0141 347 8777
Stobhill	0141 211 1927
Vale of Leven	01389817586
New Victoria Hospital	0141 347 8144

Table 4: Parkinson's disease consultant contact details via secretary

References:

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