ACUTE MANAGEMENT OF P.D PATIENTS WITH COMPROMISED SWALLOW OR N.B.M. 

(RISK OF DEATH IF MEDICATION OMITTED)

If timely Parkinson’s medication is not given this can lead to patients being unable to swallow (risk of aspiration) unable to speak, unable to move, increased risk of falls, increased care needs, pain and distress. At the worst it could develop into Neuroleptic malignant syndrome or even death.

Formulated by the PDNS group for North West
Ratified by Drugs and Therapeutics committee
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Introduction

This document has been produced following recognition of national serious adverse events including death, due to the omission of Parkinson’s medication. In the absence of national recommendations these guidelines have been developed by the North West Parkinson’s Disease Nurse Specialists in collaboration with pharmacists with a special interest in Parkinson’s Disease. The document has been in agreement with local North West Consultant Neurologists / Physicians.

The formulation of this document has also been endorsed by Professor Andrew Lees MD, FRCP, FMedSci, University college of London Hospitals NHS Foundation Trust.

Parkinson’s disease is a progressive disabling neurological disorder, resulting from the degeneration of dopamine producing neurones in the substantia nigra.

The cardinal signs being

1) Bradykinesia - slowness of movement
2) Rigidity - Increased muscle tone, may be asymmetrical or limited to certain muscle groups
3) Tremor – 30% of patients have no evidence of tremor

Parkinson’s is predominantly a movement disorder, but there is a growing awareness that it is also associated with many other problems that do not directly affect motor function, for example: anxiety disorders, depression, excessive daytime sleepiness, dementia and apathy.

This document is a guide for those patients that are admitted to hospital and are either nil by mouth or unable to swallow. It can be used in the first 48 hours; however advice should be taken from the patient’s own parkinson’s specialist as soon as possible.
On presentation to services

1) Check drug history - Family/carer, Medication brought in, Consultants letter, PD nurse, GP community pharmacist, residential/nursing home, District nurse, Ambulance green bag

2) Doses must be checked - Allow patients to self medicate where possible

3) Timings of medication - Regimes are individual, it is therefore essential to give at patients times not ward times. Late or no medication can affect mobility, swallowing, communication and causes unnecessary distress.

4) Obtain medication – DO NOT STOP PARKINSON’S MEDICATION!
Neuroleptic Malignant Syndrome is a condition caused by abrupt withdrawal or stopping of medication.

5) If on Duodopa, Apomorphine or Rotigotine patch, continue as prescribed.

For clarification of medication you may need to contact your pharmacist!
For patients who are unable to swallow or are nil by mouth, see appropriate section below:

**UNABLE TO SWALLOW**

Medical review – If necessary seek advice from pharmacist!

1) Speech and language therapist (S.A.L.T.) - a.s.a.p
2) Nasogastric tube - (consent)

**Conversion table:**

Medication which may be given via N.G tube as follows:

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Generic Name</th>
<th>Alternative</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sinemet</td>
<td>Co-careldopa</td>
<td>Co-beneldopa disp</td>
<td>Convert according to Levodopa dose</td>
</tr>
<tr>
<td>Madopar</td>
<td>Co-beneldopa</td>
<td>Co-beneldopa disp</td>
<td></td>
</tr>
<tr>
<td>Stalevo</td>
<td>Levodopa/carbidopa/entacapone</td>
<td>Co-beneldopa disp</td>
<td></td>
</tr>
</tbody>
</table>

**Antiemetic:** Only use Domperidone; this should be suppository 30 mg bd
Medication which may be safely omitted until able to swallow

C.O.M.T. Inhibitors - Entacapone / Tolcapone

M.A.O.B. Inhibitors - Selegiline/ Rasagiline / Zelapar

Amantadine (Symmetrel)

Advice regarding Dopamine Agonists: (D.A.)

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riotigotine patch</td>
<td>Continue</td>
</tr>
<tr>
<td>Apomorphine s/c (injection or infusion)</td>
<td>Continue. Use familiar pump if unsure of Apo-go pump. DO NOT STOP!! (24hr helpline: 08448801327)</td>
</tr>
<tr>
<td>Pramipexole</td>
<td>Maintain same dose, crush tablets **</td>
</tr>
<tr>
<td>Ropinirole</td>
<td>Maintain same dose, crush tablets **</td>
</tr>
<tr>
<td>Ropinirole XL</td>
<td>Convert to standard dose Ropinirole and crush as above</td>
</tr>
<tr>
<td>Pergolide</td>
<td>Maintain same dose, crush tablets **</td>
</tr>
<tr>
<td>Cabergoline</td>
<td>Maintain same dose, crush tablets **</td>
</tr>
<tr>
<td>Bromocriptine</td>
<td>Maintain same dose, crush tablets **</td>
</tr>
</tbody>
</table>

** Unlicensed use. If crushing tablets blocks NG tube, go to pathway
Pathway For patients who are nil by mouth or who do not have a patent NG tube for medication administration

Commence Domperidone 30 mg bd (suppository) A.S.A.P.

Rotigotine Patch can commence immediately

Patient already on Dopamine Agonist therapy

No previous Dopamine Agonist therapy, on Levodopa only

Rotigotine 2 mgs: (as per B.N.F guidelines)

Apomorphine infusion
Do not commence until at least 24 hours of Domperidone given. See guidelines below

Use switch guidelines below
**Switch guidelines:**

Oral dopamine agonist to Patch Treatment Conversion

<table>
<thead>
<tr>
<th>Cabergoline</th>
<th>Pergolide</th>
<th>Pramipexole</th>
<th>Ropinirole</th>
<th>Ropinirole XL</th>
<th>Rotigotine Patch</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 mg/day</td>
<td>0.125mg/tds</td>
<td>0.125mg/tds</td>
<td>Starter pack</td>
<td></td>
<td>2mg/day</td>
</tr>
<tr>
<td>1mg/day</td>
<td>0.25 mg/tds</td>
<td>0.25mg/tds</td>
<td>1mg/tds</td>
<td>4mg/day</td>
<td>4mg/day</td>
</tr>
<tr>
<td>2mg/day</td>
<td>0.5mg/tds</td>
<td>0.5mg/tds</td>
<td>2mg/tds</td>
<td>6mg/day</td>
<td>6mg/day</td>
</tr>
<tr>
<td>3mg/day</td>
<td>0.75mg/tds</td>
<td>0.75mg/tds</td>
<td>3mg/tds</td>
<td>8mg/day</td>
<td>8mg/day</td>
</tr>
<tr>
<td>4mg/day</td>
<td>1mg/tds</td>
<td>1mg/tds</td>
<td>4mg/tds</td>
<td>12mg/day</td>
<td>10-12mg/day</td>
</tr>
<tr>
<td>5mg/day</td>
<td>1.25 mg/tds</td>
<td>1.25 mg/tds</td>
<td>6mg/tds</td>
<td>16mg/day</td>
<td>14mg/day</td>
</tr>
</tbody>
</table>

**RED** = suggested conversion!
APOMORPHINE INFUSION

Apomorphine is a potent D₁ and D₂ dopamine agonist, due to its extensive hepatic first-pass metabolism; it can only currently be administered by intermittent subcutaneous injections, or continuous subcutaneous infusion. Domperidone 30mg suppository bd (minimum 24 hour prior to administering Apomorphine) and then continue.

If patient on:

<table>
<thead>
<tr>
<th>Levodopa 400mg/day or above, (or Duodopa has been discontinued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example:</td>
</tr>
<tr>
<td>Co-Careldopa 125mg QDS or Stalevo 200mg tds</td>
</tr>
</tbody>
</table>

Then Commence:

<table>
<thead>
<tr>
<th>Apomorphine 2mgs /hour (starting dose) over 24 hrs</th>
</tr>
</thead>
</table>

SUBCUTANEOUS INFUSION

If the patient is on a Dopamine Agonist and Levodopa and symptoms of rigidity and/or tremor are severe, you may need to consider increasing the Apomorphine within first 12 hours to 3 mgs per hour.

If the patient is already on Apomorphine, continue on same dose, use alternative pump if necessary DO NOT STOP!

Always monitor Blood pressure regularly, change infusion line every 12 hours, if using winged infusion line angle needle at 45%, bevel down.

If on Duodopa contact 24 hour helpline on -------0800-458 4410
Associated legislation and documents


