Bowel dysfunction and Parkinson’s Disease

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Parkinson’s Disease

• Parkinson’s disease (PD) is a common, progressive movement disorder affecting 3% of the population over 65 years of age.

• PD remains incurable and is associated with progressive disability, increased mortality and is a significant cause of inroad into health care resources.

• Diagnosis of PD can be devastating, impacting greatly on patients’ quality of life (QoL).

• PD patients may live for more than 30 years with ever worsening health care challenges that are compounded by the natural ageing process.
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• 60 – 80% of patients with PD experience bowel dysfunction.
• Symptom becomes more difficult to manage as the disease progresses.
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• PD are faced with a multitude of problems those specifically impacting on bowel dysfunction are:
  – immobility,
  – functional dependence with associated functional incontinence,
  – gastrointestinal problems
  – depression
  – inability to meaningfully communicate.
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• PD pathophysiology of the gastro intestinal tract involves the autonomic, central and enteric nervous system dysfunction

• Resulting in 4 main problems:
  1. Decreased frequency
  2. Evacuation difficulty
  3. Idiopathic problems
  4. Iatrogenic problems
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Decreased frequency

– Nutritional and fluid intake of PD patients can be compromised because of gastroparesis

– **Gastroparesis** - delay in gastric emptying may result in a delayed response time to medication.
  
  • Causes early satiety, abdominal discomfort, bloating and nausea and affects **gastro-colic reflex**
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Decreased frequency

- **Slow bowel transit** time is a major cause of decreased stool frequency in PD.
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Evacuation difficulty

• **Poor defaecation** poor ability to raise abdominal pressure for defaecation and during the **Valalva manoeuvre** -
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Valsalva manoeuvre

This involves inhaling and forcing the diaphragm and chest muscles against a closed glottis to increase both the intra thoracic and intra abdominal pressure which is transmitted to the rectum.
Correct Position

- To raise intra abdominal pressure
  - Use of foot stool
- The Loo Stool
  - Thoughtfulproducts.co.uk
  - £45.00
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Evacuation difficulty

- **Excessive straining** - patients with PD can experience a lack of synergy between the pelvic floor skeletal muscle (puborectalis muscle) and the anal sphincter muscle
- Sometimes accompanied by pain and often by a sense of incomplete evacuation.
Inappropriate contraction of the puborectalis and external sphincter muscles (both striated) is responsible for blocking anal emptying.
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Faecal incontinence (FI)

• Constipation (faecal impaction) is the most important cause of faecal incontinence in frail older people with PD
• Faecal impaction with overflow incontinence contributes to older people being moved into care homes.
• FI is symptomatic of end-stage dementia
• 25% of people with PD will develop dementia
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Faecal incontinence (FI)

• Can be due to reduced recto-anal inhibitory reflex
Time to go.....inhibiting reflex

- Full rectum
- Internal anal sphincters relax
- Proproception of contents
**Idiopathic constipation**

- Reduced dietary fibre.
- Reduced fluid intake.
- Reduced mobility or general weakness and fatigue.
- Environmental changes, such as care home.
- Lack of privacy leading to the suppression of the urge to defaecate.
- Severe pain on movement

<table>
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<tr>
<th>Functional factors</th>
<th>Advanced age, frailty, reduced mental and or physical function leading to an inability to reach or use the toilet appropriately.</th>
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Idiopathic constipation

• symptom of excessive amounts of salvia in the mouth (sialorrhea, *parkinsonian drooling*) not due to excess production but rather to impaired and infrequent swallowing – dysphagia

• **Dysphagia** has a direct impact on nutritional and fluid intake.

• Speech and language therapist can be invaluable in providing patients with different swallowing techniques
Medicines – iatrogenic constipation

- Patients taking 5 or more medications are at risk of constipation (Potter et al 2002).
- Anti depressants.
- Opioids.
- NSAIDs
- Diuretics.
- PD medication
- Regularly review medications
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- Clear consensus on risk factors:
  - Inadequate fluid intake
  - Lack of exercise /immobility
  - Insufficient dietary fibre
  - Polypharmacy
  - Toileting facilities

PLUS physiological problems associated with PD
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• Royal College of Physicians in the United Kingdom (Potter et al 2002)

• NICE faecal incontinence (2007) –suggests that proactive approach needs to be adopted for the management of constipation.
Management

- Patient education – risk assessment
- Defaecation posture
- Review medications
- Diet & fluids – use fluid matrix
- Toilet facilities - Behind Closed Doors
  http://www.bgs.org.uk/campaigns/dignity.htm
- Support – multidisciplinary (OT, SALT, Physio)
- Practical management – functional assessment
Efficacy of laxatives

• The effectiveness of laxative therapy needs to be ongoing and linked to individual patient responses.
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• Phosphate enemas and micro enemas are useful for bowel clearance.

• BUT lack of evidence to support the use of phosphate enemas in the management of constipation (Davies 2004).

  – in those over 65, especially the elderly frail with renal failure or bowel mobility problems (Mendoza et al 2007).
Transanal irrigation

New Peristeem Anal Irrigation System is portable, requires no batteries and gives individuals a measure of independence with their bowel management. Anecdotal evidence suggests this may be beneficial in PD (Coggrave & Norton 2009)
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BE PROACTIVE NOT REACTIVE IN YOUR APPROACH TO BOWEL CARE MANAGEMENT