NHS
Vale of York
Clinical Commissioning Group

Referral Support Service

Neurology

NE03
Parkinson's Disease (PD)

Definition

- Parkinson's disease is a progressive neurodegenerative disease, increasing with age, resulting from reduced dopamine levels due to death of dopamine containing cells in the substantia nigra.
- The prevalence is 0.1-0.18% which means that a practice of 6000 patients will have 6-11 patients who suffer with Parkinson's disease. Recent figures have suggested (with the ageing population) that prevalence may be growing nearer 0.5%
- Parkinson's disease is essentially a **clinical diagnosis** with the classical clinical features of bradykinesia, rigidity and rest tremor (see below), but also significant non-motor features.
- Other causes of the clinical features of Parkinson's disease i.e. *parkinsonism* may include drug side effects (anti-emetics and anti-psychotics) and multiple small strokes.

Presentation:

The typical clinical features of Parkinson's disease are:-

Motor Symptoms

- Bradykinesia slowing of movement.
- Resting tremor often asymmetrical and maybe of 'pill-rolling type'. It may be worse with tiredness, stress and being watched.
- Rigidity difficulty turning in bed is often a symptom of Parkinson's disease.
- Other symptoms may include changes in speech and postural instability.

'Non-motor' symptoms are common in Parkinson's disease and cause significant disability and distress. These include; - pain, orthostatic hypotension, depression and anxiety, dementia (lewy body type), daytime sleepiness, REM Sleep Disorder, loss of smell, bladder dysfunction, constipation, drooling, excessive sweating and sexual dysfunction.

If Parkinson's disease is suspected, but the person is taking a **drug** (see hyperlink for full list) known to induce parkinsonism:

- Reduce or stop the drug if possible and appropriate.
- Do not delay specialist referral to assess the response.

Examination:

Neurological examination may show tremor as above, rigidity –possibly 'cogwheel' type if tremor present, paucity of facial expression - 'mask-like facies' and changes in gait with stooping, shuffling and poor arm swinging. Speech changes –nasal type, flattened and stuttering in nature.

Clinical suspicion may be raised that the problem is due to causes other than Parkinson's disease in the presence of:-

- Frequent early falls
- Rapid and relentless progression with early mobility loss
- Prominent early dementia
- Treatment with drugs that may cause Parkinsonism such as anti-emetics and anti-psychotics.
- Cerebellar signs such as nystagmus and ataxia.
- Pyramidal signs such as local muscle weakness, spasticity and increased reflexes.
- Abnormality of eye movements such as nystagmus or focal loss of movement.

Most care is provided by specialists and all pharmalogical therapies should be recommended or initiated by specialists, but these points from NICE NG71 July 2017 may be helpful in general practice

- Ensure anyone with confirmed disease has a comprehensive review of all aspects of their care at least every 6–12 months.

- Provide the person and their family/carers with additional sources of information and support, e.g. Parkinson's UK

- At the time of diagnosis, and if there is a change in their clinical condition, advise any person who drives to inform the DVLA and their car insurer. Advise people who have daytime sleepiness and/or sudden onset of sleep not to drive (and to inform the DVLA of their symptoms) and to think about any occupation hazards.

- Offer a regular medication review, asking about adherence with medication and any adverse effects, and liaise with the person's specialist if needed. Liaise with the person's specialist or Parkinson's disease nurse if changes to anti-parkinsonian medication are needed. Advise people with Parkinson's disease to take a vitamin D supplement which is available OTC.

- If a person with Parkinson's disease has developed orthostatic hypotension, review the person's existing medicines to address possible pharmacological causes, including **antihypertensives (including diuretics); dopaminergics; anticholinergics; antidepressants**

- For guidance on identifying, treating and managing depression in people with Parkinson's disease, see the NICE guideline on depression in adults with a chronic physical health problem.

- At review appointments and following medicines changes, ask people with Parkinson's disease and their family members and carers (as appropriate) if the person is experiencing hallucinations (particularly visual) or delusions

- NG 71 states Offer a cholinesterase inhibitor[6] for people with mild or moderate Parkinson's disease dementia. Please not **cholinesterase inhibitors – donepezil, rivastigmine and galantamine** are all currently amber – specialist recommendation.

- Offer referral to other members of the multidisciplinary team, such as speech and language therapy, physiotherapy, occupational therapy, adult social care, community nursing, continence and urology specialists, and psychology and mental health services, as necessary – for assessment, education and advice. (A diet in which most of the protein is eaten in the final main meal of the day can help people with Parkinson's disease on levodopa who experience motor fluctuations.)

- Assess the needs of any carers involved, and discuss the option of respite care, if appropriate

- Offer the opportunity to discuss the prognosis of their condition, advance care planning and end-of-life issues at any stage after the initial diagnosis, and offer referral to the palliative care team as appropriate. See the Scenario: End-stage Parkinson's disease for more information.

Referral Information

Referral to neurologist or geriatrician

- Patients presenting with clinical suspicion of Parkinson's disease should be referred promptly to a specialist in Movement Disorders either a Neurologist or Geriatrician **before any treatments are started.** (NICE recommends that people with suspected mild Parkinson's disease are seen within 6 weeks, and people presenting with later, complex disease are seen within 2 weeks). Referral is at the GPs discretion however, in general patients aged 75 and over or 65 and over with complex needs should be referred to a geriatrician).
- Patients with known Parkinson's disease should be re-referred if they develop atypical features, for example weakness, double vision, increasing falls.
- Treatment is based on a multi-disciplinary model including physiotherapists, Parkinson's disease nurse specialist, Occupational Therapist and Speech and Language Therapist.

Information to include in referral letter

- Please include full details of the Parkinson's disease -type symptoms including any suspected non-motor type symptoms. Details of the effects on activities of daily living are helpful. Please include drug treatment especially if there is any potential for Parkinson's disease - type side effects.
- Please include details of any signs of Parkinsonism along with details of general neurological examination.
- Investigations are not necessary before referral.

Patient information leaflets/ PDAs

- www.parkinsons.org.uk
- www.nhs.uk/conditions/Parkinsons-disease/Pages/Introduction.aspx

References

- NICE – NG71 Parkinson's disease in adults July 2017 https://www.nice.org.uk/guidance/ng71/
- NICE CKS Parkinson's disease management Feb 2016 https://cks.nice.org.uk/parkinsons-disease
- BMJ learning – initial assessment and referral.
- Parkinson's UK - professional guide
- www.parkinsons.org.uk - https://www.parkinsons.org.uk/sites/default/files/publications/download/english/fs38_druginducedparkinsonism.doc