



# Parkinson's Disease

## Dr Duncan Gerry

Local service provision and  
diagnostic difficulties

# Parkinson's Disease

- Background
- Diagnostic dilemmas
- Local pathway
- Questions.

# How common?

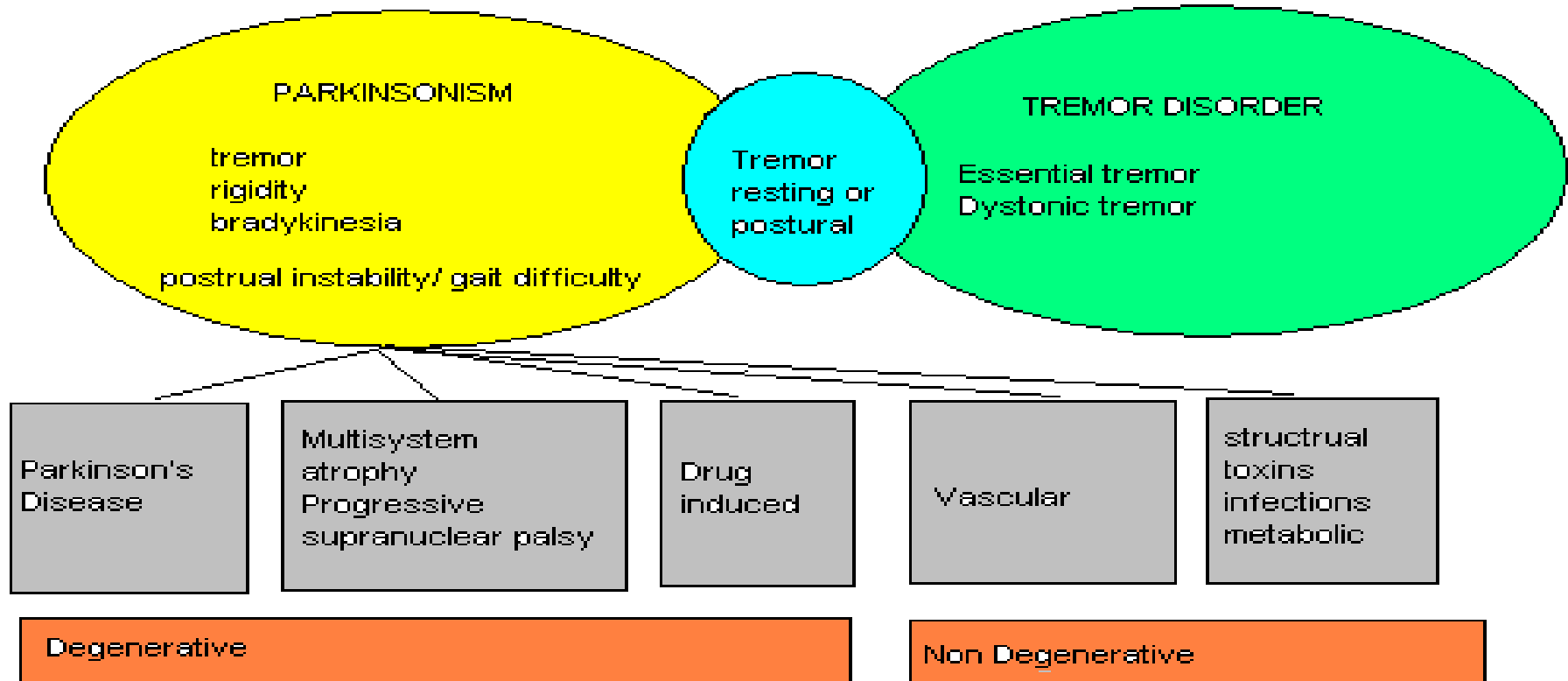
- A common progressive neurological condition increasingly common in the elderly and in men.
- Commonest in the elderly
  - 2% in the over 80s increasing to 10% of the institutionalised elderly
- Incidence and Prevalence
  - 4-20/100,000 incidence and
  - 100-180/100,000 prevalence
  - The average general practice list in the UK with 6000 patients have between 6-11 patients with PD and may see one new diagnosis per year.
- But... is easily mistaken for other conditions.
  - Internal audit in Hillingdon found that of all patients referred for 'PD' that only ¼ of these actually had true Idiopathic Parkinson's disease.

# Diagnostic error rate

- Community based care
  - 50%
- Secondary care
  - 25%
- Secondary care using the brain bank criteria and time.
  - 2-10%
- Changing diagnosis over time:
  - to 8% of cases in specialist centres have the diagnosis revised.

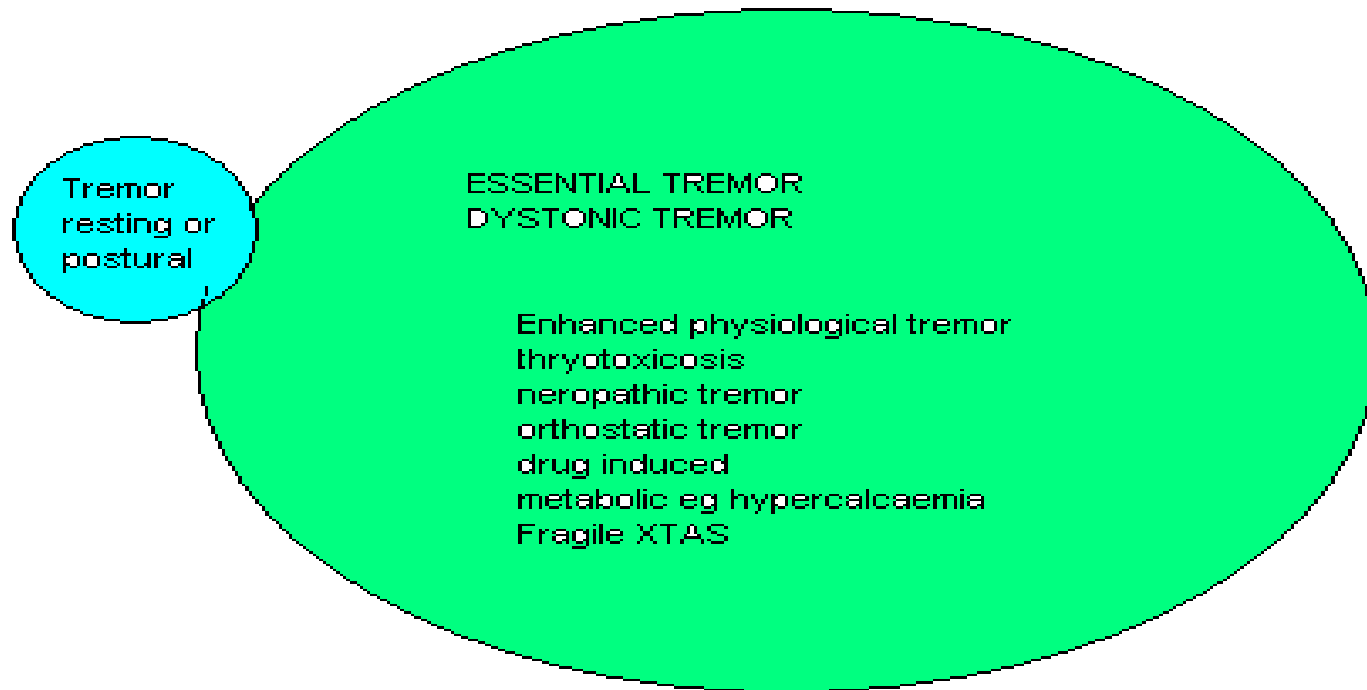
# The differential diagnosis – a case of mistaken identity

## DIFFERENTIAL DIAGNOSIS



# Differential diagnosis

## TREMOR DISORDERS





# Diagnostic criteria

- Brain bank criteria has 3 stages
  1. suggestive of PD
  2. Suggests something else
  3. supportive of the diagnosis.

# Step 1 – suggestive features

- Bradykinesia with two out of three of
  - Tone
    - Either lead pipe or cogwheel
  - 3-5 Hz Tremor
    - Classically a rest tremor, unilateral at onset and in the upper limb.
  - Postural instability
    - Not caused by other factors (1' visual, cerebellar, proprioceptive or vestibular disorders)

# Exclusion criteria:

- Multiple strokes,
- repeated head injury,
- history of definite encephalitis,
- Oculogyric crisis
- Neuroleptic treatment
- More than one affected relative
- Sustained remission
- Extensor plantor response (Babinski sign)

# Exclusion criteria:

- Strictly unilateral features after 3 years
- Supranuclear gaze palsy
- Cerebellar signs
- Early severe autonomic involvement
- Early severe dementia
- Presence of a tumour or hydrocephalus
- Negative response to large doses of L-Dopa
- MPTP exposure

# Supportive criteria (3 or more for a definite diagnosis of PD)

- Unilateral onset
- Rest tremor present
- Progressive disorder
- Persistent asymmetry
- Excellent response to L-Dopa
- Severe L-Dopa induced chorea
- L-Dopa response for 5 years or more
- Clinical course of 10 years or more.

# What to refer, when and how.

- Geriatrics vs Neurology
- Treated or untreated
- Follow up

## PD pathway

GP concerned about possible PD (Bradykinesia + increased tone, instability or tremor)

Maximum 6 weeks from referral to specialist review



Specialist with an expertise in Parkinson's Disease  
with provision for long term follow up

Under 65 - Neurology consultant  
Over 75 - Dr Gerry  
Over 65 with complex needs - Dr Gerry  
65-75 - GP discretion



Multidisciplinary assessment



SAP and integrated care plan

Including:

PD specialist nurse  
Physiotherapy  
Occupational therapy  
Speech and Language therapy

Consider referrals to  
social care  
Rehabilitation  
Voluntary sector  
Support Groups



Ongoing review (specialist with an expertise in PD and MDT)

MDT pharmacy reviews  
Case management

Neuropsychiatric  
liaison/ review

Complex  
needs;  
medication  
PEG

Neurosurgical  
intervention

End of life care,  
advanced  
directives, care  
plans



Any questions?

