OLD AGE PSYCHIATRY
Psychiatric disorders of the elderly

- Dementia
- Depression
- Delusional disorder/late onset schizophrenia
- Delirium
Dementia – definition

- Impairment of multiple higher cortical functions including memory
- Acquired
- In clear consciousness
- Progressive
- No reversible cause
- For research purposes – present for at least 6 months
LOCALISATION OF CEREBRAL FUNCTION

Frontal lobe:
- judgement
- reasoning
- behaviour
- voluntary movements
- expressive language
(Broca’s area)

Parietal lobe:
- spatial orientation
- perception
- initial cortical processing of tactile and proprioceptive information
- language comprehension
(Wernicke’s area)

Temporal lobe:
- emotions
- learning and memory
- audition
- olfaction
- language comprehension
(Wernicke’s area)

Occipital lobe:
- vision

9.1 Localisation of cerebral function.
Types of Dementia

- Alzheimer’s disease [AD]
- Vascular disease [VaD]
- Mixed AD & VaD
- Lewy Body disease [LBD]
- Frontotemporal dementia [FTD]
Other causes

- Infective
- Inflammatory
- Neoplastic
- Metabolic
- Endocrine
- Toxic
- Traumatic
Alzheimer’s disease

- Most common form of dementia - 50% of all cases.
- Probably affects 500,000 in the UK.
- Estimated that at least 15 million people are affected worldwide.
- Prevalence rates doubles for every five years of age from age of 65.
PET scans in AD
NEUROPATHOLOGY

- Selective neuronal and synaptic loss – a cholinergic deficit.
- Symmetrical cortical atrophy – temporal and parietal lobes.
- Excess of extracellular senile plaques and intracellular neurofibrillary tangles.
- Related to degree of cognitive impairment
Alzheimer’s Tangles
Alzheimer’s Plaques
AD - DEGENERATION
Risk Factors for AD

- Age
- Female sex
- Genetic factors – APP, presenilin 1 and 2, Apo E on Ch 19
- Head Injury
- Downs syndrome
- Family history
- Severe depression
- Vascular Risk Factors
CLINICAL FEATURES

- Insidious onset and progression of memory loss and personality changes
- Affects cognition, ADL, and behaviour
- Progressive impairment in sufferer’s ability to function in daily life
- Most frequent kind of disability leading to institutionalisation
- Death occurs in most patients within 5–10 years of diagnosis
- Often progresses more rapidly in younger people
VASCULAR DEMENTIA

- Common in males; 20% of all dementias
- Mixed dementia – evidence of both AD and vascular dementia.

Vascular Dementia

- May be caused by:
  - multiple infarcts
  - white matter low attenuation
  - single strategic infarct, eg thalamus, angular gyrus, hippocampus

- Above 85 years may occur more frequently than AD

- Requires risk factor assessment

  (Amar and Wilcock 1996)
AETIOLOGY

- Older age
- Male sex
- Cardiovascular disease
- Cerebrovascular disease
- Valvular disease
- Coagulation disorders
- Hypertension
- Hypercholesterolemia
- Diabetes
- Smoking
- Alcohol
CLINICAL FEATURES

- Abrupt onset, stepwise progression.
- Mood and behavioural changes common.
- Insight usually retained till late.
- Clinical features depend on size of infarct.
- Shorter life expectancy than AD.
DEMENTIA WITH LEWY BODIES

- May form part of spectrum of Lewy body disorders – Parkinson disease.
- DLB – Lewy bodies more in cortical areas
- Parkinson's disease – more in basal ganglia
- Neuropathology – Cortical and sub cortical structures involved
CLINICAL FEATURES

Diagnosis of Lewy Body Dementia -1
(Based on McKeith et al 1996)

• Core Features:
  “Probable” requires 2, “Possible” requires one
  - Fluctuating cognition with pronounced variations in attention and alertness
  - recurrent visual hallucinations, typically detailed and well formed
  - spontaneous motor features of parkinsonism
Diagnosis of Lewy Body Dementia
(Based on McKeith et al 1996)

Supportive features include:
• repeated falls
• syncope
• transient loss of consciousness
• neuroleptic sensitivity
• systematised delusions
• hallucinations in other modalities
FRONTOTEMPORAL DEMENTIAS

- 5% of all dementias.
- More common in females.
- Peak age of onset 45-60 years
- Aetiology – unclear, familial forms exist
- Neuropathology – Pick cells, Pick bodies, Knife blade atrophy – frontal and temporal lobes.
- Early personality changes and behavioural disturbances, mood changes, language abnormalities, cognitive impairment, motor signs
DIFFERENTIAL DIAGNOSIS - DEMENTIAS

- Amnestic syndrome
- Mild cognitive impairment
- Delirium
- Depressive disorders
- Late onset schizophrenia
- Learning difficulties
- Substance misuse
- Iatrogenic causes
- Malingering
Investigations

Physical examination

Laboratory investigations include:

- FBC, B12, Folate
- U&E, LFT’s, Ca, Glucose, Cholesterol
- Serology for syphilis, TFT’s, CXR

Neuroimaging:

- CT scan on all patients,
- MRI, SPECT when appropriate

Other investigations-as clinically indicated

Neuropsychological assessment

MMSE
Common Treatable Causes of Dementia

Normal pressure hydrocephalus
Hypothyroidism
Pseudo dementia of depression
Nutritional deficiencies
- B12, folate, thiamine (Wernicke’s encephalopathy)
Chronic alcoholism
Space occupying lesions
- primary and secondary tumours
- cerebral abscess
Chronic disturbance of calcium metabolism
Subdural haematoma
Neurosyphilis
MANAGEMENT

AD and LBD – Cholinesterase inhibitors
Three currently licensed that have been “accepted” by NICE:
- Galantamine (Reminyl)
- Donepezil (Aricept)
- Rivastigmine (Exelon)
All very similar in effect, and help about half the people they are given to.

Memantine -Moderate to severe AD
Non-competitive glutamate NMDA receptor antagonist.
Reduces postsynaptic excitotoxicity
Benefits functional ability, global function, cognition
OTHERS

- Functional problems - environmental modifications, memory aids, daily routine, graded assistance
- Social problems – financial, legal matters, accommodation.
- Carer education and support
DEPRESSION - ELDERLY

- Community studies show prev. rates similar in young and old.
- High rates among physically ill.
- Worsens prognosis
- Slower rehab
- Poor motivation/compliance
- Effects on immune system
Similar presentation to young but may present atypically-

- Less psychological symptoms
- More somatic ones - insomnia, hypochondriacal concerns, fatigue
- Apparent late onset anxiety state
- Self medication with alcohol
Depressive pseudodementia

Assessment 2. Mental state exam
depression vs. dementia

DEPRESSION
- Onset acute
- Looks depressed
- Biol. Sx.
- D.V.M.
- PAST/ family Hx.
- Inconsistent,”D.K.”
  -answers
- Distressed by mistakes

DEMENTIA
- Insidious onset
- Affect may be flat/blunted
- A.D.Ls affected
- S.T.M. particularly poor
- Consistently impaired
- Other cog. Disabilities
- Minimises deficits
Look for other causes - secondary depression

Consider -
- Parkinson's disease
- Early dementia
- Endocrine disorder
- Carcinoma
- “Vascular depression” – sub cortical ischaemia – central executive dysfunction, loss of motivation, treatment resistance
Treatment

- Antidepressants
- Delayed or inadequate treatment predicts poor outcome.
- Antidepressants + CBT - more effective
- Avoid TCAs as first line treatment
- E.C.T is highly effective and may be life saving
Late onset schizophrenia like psychosis

- Schizophrenia first presenting over the age of 65 (0.5% of cases)
- Typical patient
  - Female (M:F = 1:7)
  - Alone (spinster, widow)
  - Deaf (+ often visually impaired)
  - Abnormal premorbid personality
  - Subtle cognitive impairment (frontal)
Symptomatic differences (cf schizophrenia)
  - Preservation of personality
  - Functioning well
  - Less negative symptoms
  - Less formal thought disorder

Hard to engage patients
First step is to develop rapport (with CPN)
Antipsychotic meds at lower dose.
DELRIUM

- Syndrome – fluctuating global cognitive impairment with behavioural abnormalities
- Common in medical and surgical inpatients – 10 to 20%
- Vulnerable groups – elderly, dementia, young, postoperative, burns, drug misuse, physical illness.
**DELIRIUM - features**

- Impaired level of consciousness
- Global impairment of cognition
- Sleep wake cycle disturbances
- Perceptual distortions / hallucinations
- Psychomotor agitation
- Emotional lability
- Paranoid delusions
- Onset – rapid/fluctuations
Aetiology – Delirium

- Multifactorial
- Drugs
- Metabolic
- Endocrine
- Infective
- Substance misuse
- Hypoxia
- Neurological
- Others
Management

- Identify and treat cause
- Environment and supportive measures
- Avoid sedation unless to minimise risks
- Regular review and follow up.
References

- NICE guidelines – Dementia
- Understanding biology of mental health disorders Timothy G. Dinan
- Key topics in psychiatry ,Sheena Jones and Kate Roberts
- Evidence based dementia practice(2002)
- www.rcpsych.ac.uk