Dementia, delirium and drugs

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Summary

• Some cases
• What should GPs know about dementia?
• What should GPs know about delirium?
• Some tips on deprescribing in frail older people
Case 1: Mr Arran

- 86 year old
- Retired university academic
- Concerned about his memory
- PMH: OA, depression (resolved with SSRI), COPD
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Cognitive screening tests

- Many different tests available
  - 6CIT, GPCog, MMSE, MoCA...
- Don’t tend to measure executive function well
- Need to assess for depression
- Consider blood screening tests
  - FBC, B12, Fol, U&E, Ca, TFT, Glu/HbA1c

- If all normal, and no impact on function, ? Normal cognitive impairment/MCI
Cognitive ageing

Test score

Crystallised ability

Fluid ability

Young adulthood

Old age
ACHE
THYME
SYNCOPE
LEVIATHIAN
FLUID ABILITIES

The Foundation of Adult Cognitive Functions

- Memory
- Reasoning
- Speed of Thought
- Problem Solving Ability
Cognitive ageing

Test score

Crystallised ability

Fluid ability

Young adulthood

Old age
Cognitive ageing

Test score vs. Young adulthood vs. Old age
Cognitive ageing

Test score

Young adulthood

Old age

0
Your Brain Health Clinic blueprint

**Identification:** Primary care

Early identification and onward referral.

At the moment, we only assess those who present with dementia, providing crisis management over preventative support.

**Assessment:** BHC

Detailed assessment to clarify diagnosis.

By assessing all those with MCI, we can risk stratify patients, making sure they get the best support, information and care at the time they need it.

**Patient journey:** BHC

Identify low and high risk groups and recommend personalised interventions to reduce the conversion rate to dementia.

We can equip people to live brain-healthy lives, enable them to live better for longer and improve overall involvement in and access to research programmes.

**Ongoing care:** BHC or primary care

Support patients in the most appropriate setting and ensure no-one falls through gaps.

Ongoing care and monitoring, and opportunity for re-referral, can take place in either primary or secondary care.

**Resources**

Use existing services and roles in new ways so that you can better support individuals, improve the health of your overall community, and prevent up to 30% of people from developing dementia. These resources outline and signpost to help you.
Risk factors for dementia

The Lancet Commission presents a new life-course model showing potentially modifiable, and non-modifiable, risk factors for dementia.

Livingston et al. (2017) Lancet
Learning points?

• Beware a ‘snapshot’ assessment
• Be aware of different domains of cognition
• Importance of education, socio-economic circumstances: a lifecourse perspective
• Consider depression/anxiety
• Can refer for more detailed cognitive testing and annual monitoring
• MCI if cognitive impairment, no impact on function, amnestic pattern (cv Vascular Cognitive Impairment)
• Some actions can protect brain health
Case 2: Mr Bute

- 82 years old
- Retired teacher
- Family concerned, forgetting things, speech more hesitant, ‘not herself’, gradually worse last 2 years (worse since COVID)
- PMH: hypertension, AF, #NOF
Case 2: Mrs Bute

- Cognitive screen
- Medical exam
  - ? Parkinsonism; vascular disease; pulse
- Bloods
- Refer to memory clinic
Case 2: Mrs Bute

- Cognitive screen
- Bloods
- Refer to memory clinic
  - ACE III
  - CT / MRI
  - SPECT

- Medication
  - Donepezil, rivastigmine, galantamine
  - Memantine
- Post diagnostic support
- Alzheimers Scotland
Differentiating dementia subtypes

• Most cases probably ‘mixed’
• Alzheimer’s most common
  • Presentation: amnestic/language/visuospatial/executive dysfunction
• Vascular if temporally related to stroke
• Dementia with Lewy Bodies:
  • Fluctuating attention/concentration, visual hallucinations, parkinsonism, REM sleep disorder, severe neuroleptic sensitivity, abnormal DAT scan
Learning points about dementia

• Some families are very aware of dementia but many aren’t
• Alzheimer’s / Vascular
  • Often overlap
  • For all, address vascular risk factors (impact unclear)
  • AChEI/memantine may be indicated
    • Watch for bradycardia, incontinence, GI upset, COPD worsening
• Post-diagnostic support
  • Long waits but can be useful
  • Alzheimer’s Scotland/Facebook groups
• Carer support
• Be aware of increased risk of delirium (and vice versa)
Cognitive ageing

MCI – prognostically uninformative

Functional assessments are value laden

‘prodromal AD’ better term

https://www.mind.uci.edu/alzheimers-disease/what-is-alzheimers/mild-cognitive-impairment/
Your cognition/dementia cases: let’s discuss....
Case 3: Mr Canna

- 82 years old
- Daughter distressed, ‘seeing things’, not sleeping, not himself
- PMH: Alzheimer’s dementia, BPH, alcohol excess, hypertension
Delirium

- Rapid (hours, days) deterioration in mental functioning,
- Triggered by
  - Acute illness (any infection, MI), pain
  - side effects of medication, constipation
  - urinary retention, UTI,
  - alcohol/drug withdrawal etc etc
- Common
  - 15-20% hospitalised patients
  - 1-2% in community
    - ~15% in people over 85/care homes
    - can be up to 60%
Why is it important?

“All types of weird things were going on in my head. The whole thing was terrifying. I remember speaking to Gloria on the phone to tell her that there was a bomb about to off. I was firmly convinced that this was going to happen. It was the worst experience of my life.”
Consequences of delirium

- Risk of future dementia
- Length of hospital stay
- Mortality
- Dehydration
- Aspiration pneumonia
- Severe distress
- Falls
- Poor nutrition
- New institutionalisation
- Readmission rates
- Post-traumatic stress symptoms
- Pressure sores
Clinical care of delirium

Detection

Processes in delirium care

Treatment

Prevention
Detection

• A useful tool

• Or ‘SQuID’
  • “Is this person more confused than before?”
Treatment

- Initial check for acute, life-threatening causes
- Identify & treat causes
- Optimise conditions for brain recovery
- Detect & treat distress
- Prevent complications
- Communicate with patient & carers
- Rehabilitation during delirium
- Monitor for recovery
- Consider dementia
- Consider follow-up

Delirium 8
‘Treat the cause(s)’

- **Drugs:** no evidence of overall effect
- Don’t prescribe just because of a diagnosis
- If severe distress, and non-pharm methods failed ->
  - Short term risperidone, haloperidol (low dose)
  - Benzodiazepines if alcohol, LBD
  - Reassess every 1-2 days and STOP
‘Treat the cause(s)’

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Don’t treat asymptomatic bacteruria....but do treat in context of delirium....but look for other causes!

#Don’tBeADipstick
## Prevention

### Delirium prevention in practice

- Orientation
- Vision
- Hearing
- Sleep
- Early mobilisation
- Pain control
- Postoperative complications
- Hydration
- Nutrition
- Regulation of bladder and bowel function
- Hypoxia
- Medication review

Basis is good routine care, using ward systems

NB reorientation, engagement, sensory impairment

Avoid iatrogenic harms, e.g. dehydration

Medication review

**Take care of the brain and the body**
Learning points about delirium

• Always be alert for delirium
• Protect the brain
• Consider distress (and legal aspects)
• Communicate well
• Consider dementia (persistent delirium in 30-50%)
Case 4: Mrs Dornoch

• 94 years old
• Fell at home, confused
• PMH: OA, AF, IHD, hypertension #humerus, #NOF, hypothyroid
• Warfarin, bisoprolol, amlodipine, ramipril, isosorbide mononitrate, furosemide, simvastatin, paracetamol, MST, alendronate, CaVitD, folate, solifenacin, senna, macrogol
Polypharmacy

- >=5 medications
- Establish ‘potentially inappropriate medications’
- Use established tools
- Consider frailty, cognitive function, life expectancy
- Discuss goals of care/what matters most
- Review medications
- Use tools and frameworks
- Geriatric medicine approach
- Stop medications where appropriate

https://www.thelancet.com/journals/lanhl/article/PIIS2666-7568(21)00054-4/fulltext
Polypharmacy

• BEERS criteria
• STOPP criteria
• STOPPfrail
• SG/NHS Scotland ‘ManageMeds’ app
• https://deprescribing.org/resources/deprescribing-guidelines-algorithms/ (PPI, antihyperglycaemic, antipsychotic, sedatives, dementia drugs)

https://www.bgs.org.uk/resources/medicine-optimisation-recommended-reading-and-resources
https://www.thelancet.com/journals/lanhl/article/PIIS2666-7568(21)00054-4/fulltext
Approaches to polypharmacy/deprescribing

• Note sex and gender considerations
  • Women more likely to be caregivers and may not have caregiver to advocate for them
  • Women use more prescribed and OTC medications than men
  • Women more often prescribed psychoactive drugs, less often prescribed secondary prevention, might need lower doses

• Consider if presentation could be a side effect, note ‘prescribing cascades’
• Involve a pharmacist (+/- geriatrician) – Day Hospital/H@H eg if multimorbidity, complex eg falls (hypertension with postural hypotension)
Case 4: Mrs Dornoch

- **D** – avoiding falls, staying at home, avoid stroke
- **R** – BP now 100/60; no pain; ? Prescribing cascades
- **U** – PIP (STOPPFrail) – statin, Ca, alendronate, ACEI, vitamins
- **G** – falls risk factors, continence
- **S** - Warfarin, bisoprolol, amlodipine, ramipril, isosorbide mononitrate, furosemide, simvastatin, paracetamol, MST, alendronate, CaVitD, folate, solifenacin, senna, macrogol
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- ?apixiban; ?reduce dose of bisoprolol; stepwise stopping of BP meds; may be able to stop furosemide (after amlodipine) & laxatives after MST; NSAID gel/heat/cold/TENS for pain; laxatives
Great things are done by a series of small things brought together.

Vincent Van Gogh

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