Neuroleptics in the elderly and patients with Alzheimers

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Disclosure

- I have no financial interests in or sponsoring by companies in any area related to the use of neuroleptics or other psychotropic drugs in patients with dementia.
What is dementia?

- Irreversible cognitive decline
- Frequent: >65 = 5% >80 = 20% (French data (2007) >65 3.86% >85 12.4%)
- Behavioural and psychological disturbances (BPSD) are frequent: 80% will suffer from a BPSD during the disease
- Consequences are very serious – distress for patient and carers, major cause of placement in nursing home

BPSD symptoms and treatment

- Carers demand treatment urgently
- Non-pharmacological treatments are not always available
- Treatment is often started in primary care
- Once treatment is started, carers often resist treatment withdrawal
**What are neuroleptics?**

- **Actions**
  - Powerful sedatives
  - Specific antipsychotic effects
- **Types**
  - Typical
  - Atypical
- **Uses**
  - Principal use is in psychosis in younger patients
  - May be used as anxiolytics and as an alternative to sleeping pills
  - Have well known side effects, more common in the elderly

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**The elderly and psychotropic drugs**

- Prescription is frequent in France: 35.2% of >65
- Use increases with age
- More common in women
- High use not confined to France: Finland 39%, Sweden 27% (men) and 40% (women)
- Drug use profile varies between countries
- Co-prescription is frequent

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Étude CNAMTS 2000, HAS & psychotropics in the elderly working group 2010:
Evolution of neuroleptic use

- Canadian study
- Gradual increase in atypical neuroleptic use
- Gradual decrease in typical neuroleptic use
- Slow down of use following warnings

Valiyeva 2008

Treatment: compliance and efficacy

- Most patients stop their treatment after 20 weeks because of either:
  - Lack of improvement
  - Side effects
- Metanalysis with 5353 patients and 1757 controls
- Limited benefits: CGI improvement of 0.1 – 0.2
- Effect on symptoms
  - Agression: risperidone, olanzapine NNT 5-11
  - Hallucinations / delusions risperidone NNT 13.8
  - Agitation: little or no effect

Schneider NEJM 2006, Schneider Am J Ger Psych 2006, Cochrane 2008
Hidden side effects: stroke

- Meta analysis risperidone 2003: 4% treated patients suffered stroke vs 2% placebo
- Canadian study: risk typicals = atypicals
- Study in primary care: demented patients treated by neuroleptics have a risk of stroke 3.50 (CI 2.97 – 3.10). risk typicals > atypicals


Hidden side effects: death

- Metanalysis: increased mortality, death 3.5% vs 2.3% in placebo, OR = 1.54 (1.06 – 2.23) Typicals = atypicals
- DART-AD study: 128/183 patients randomised to continuing treatment or stopping. Excess mortality of 5-8% in patients who continued their treatment

Schneider JAMA 2005, Cochrane 2008 Ballard 2009
Hidden side effects: cognition

- Anti-cholinergic side effects theoretically should worsen cognitive function
- Quetiapine study: deterioration in treated patients
- LASER study: cognitive function stable over 6 months with or without treatment
- Global deterioration more important in patients treated by neuroleptics, and this effect is increased by combining neuroleptics and hypnotics/anxiolytics.


Can we stop neuroleptics?

- DART-AD study: treatment withdrawal leads to little change in SIB/NPI
- Most severely affected patients (NPI >15) benefit the most from treatment.

DART-AD study Ballard 2008
From macro to microsystems

- Study of the REHPA network by Antoine Piau: 236 AL facilities and 4367 residents (4367 89.2% included in the multivariate analysis)
- Aim: to study factors associated with anti-psychotic use
- Population: 72-74% female with a mean age of 85 years
- Dependant: 44% walk unaided, 52% eat unaided
- Mean prescriptions 6.8 per day
- Hospitalisation rate 54% over 1 year

Dementia and BSPD

- 43% have dementia
- 30% have at least one BSPD
  - Aggressiveness 19.6%
  - against the carer 80.34%
  - against the other residents 37.0%
  - Vocalization 10.8%
  - Wandering 10.9%
- 17% have restraints
- 27.4% have regular antipsychotics
- Over 40% of physicians rated BPSD as the most difficult problem to manage (>15% dementia, <10% falls)
Antipsychotic prescribing

- Use associated with dementia (34.2% vs 22.6%)
- Started in hospital
- Contraindications not observed: prescribed in 23% of patients with cardiovascular and 22.5% patients with cerebrovascular diseases

### Conclusion

- Information from macro studies needs to be harnessed to power changes at microsystems level: in this case high levels of prescribing of drugs with dangerous side effects
- To change systems accurate information about local practices is needed in order to develop counter measures.