Good Practice In BPSD Management

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Prevalence of BPSD

• In community
  – 2/3 PWD have at least one behavioural Sx
  – 1/3 PWD have significant symptoms
• In developing countries, rates are similar
• In residential care
  – 40- 90% residents w dementia have BPSD
  – Rates in similar NHs vary >3-fold

Why are BPSD important?

- Ubiquitous, >90% of PWD during course
- Distress to PWD and to caregivers
- Increase rate of institutionalisation
- Higher rate of complications in hospital
- Faster rate of decline
- Associated with increased mortality
Pharmacological therapy - principles

- Treat cause
- Non-pharmacological first, unless urgent
- Informed consent or proxy consent
- Start low and go slow
- Regular review – at least 3 monthly
How effective are drug treatments?
Sertraline for treatment of depression in AD: Wk-24 Outcomes (DIADS-2)

- 67 Sertraline, 64 placebo; 12 wk RCT + 12 wk
- No between-groups diff. in depression response
  - in CSDD score
  - remission rates
  - secondary outcomes
- SSRI associated > adverse events of diarrhoea, dizziness, dry mouth, pulmonary SAE (pneumonia)

HTA-SADD Trial

• Mirtazapine 15 mg & sertraline 50 mg; 1→3/day

N = 507

Visit Placebo Sertraline

Mirtazapine 95% CI

DEMQOL

CSDD Score

DEMQOL-Proxy Score

Banerjee S, HTA-SADD trial, Lancet, 2011
Citalopram

- Improved agitation/aggression, psychosis & lability/tension, and cognition & retardation\(^1\)
- Decreased agitation and psychosis (suspiciousness, hallucinations, delusions)\(^2\)
- ? decreased irritability and apathy\(^3\)

CitAD RCT – citalopram & agitation

- Significant better with citalopram
- Cognitive & cardiac adverse effects may limit effectiveness at 30mg/day

Ginkgo biloba for BPSD

- Three trials Ukraine, Russia and Bulgaria
- 1294 outpatients with mild-mod AD + VaD
- EGb 761, 120-240mg/day
- Improvements of cognition and BPSD
- Drug was safe and well-tolerated

ChEIs & BPSD

- 29 RCTs, mild-mod AD; 1.72 points on NPI (6 trials) & 0.03 on ADAS-noncog (10 trials) vs PBO; Apathy, hallucinations > benefit Trinh N-H et al, 2003

- Systematic review – only 3/14 RCTs significant reduction in BPSD Rodda et al, 2009


- Individual Sx may be more susceptible: apathy, hallucinations, aberrant motor behaviour, delusions, anxiety, depression www.ipa-online.org
Memantine on BPSD

• Mixed results
  – Several negative results $^{1-2}$
  – Some positive results $^{3-4}$

• Specific benefits reported for cluster of aggression, hallucinations & delusions

$^1$ Reisberg B et al, 2003; $^2$ Van Dyck et al, 2007;
Anticonvulsants for BPSD

- Literature review of 7 RCT (2 carbamazepine & 5 valproate)
- Results (treatment vs placebo):
  - 1 study: sig. ↓ BPSD
  - 5 studies: no sig. difference
  - 1 study: sig. ↑ BPSD
  - AEs more frequent in treatment groups
- Might be beneficial for some patients
- Not recommended for routine use

Antipsychotics for agitation, aggression and psychosis

- DB RCTs
- Haloperidol $^{1,2}$
- Risperidone $^{2,3,4}$
- Olanzapine $^{5,6}$
- Quetiapine $^7$
- Aripiprazole $^8$

Effects of antipsychotics

• Meta-analysis from 13 studies\(^1\):
  – Mean ES in Rx = 0.45
  – Mean ES in placebo = 0.32

• Effect sizes of atypical antipsychotics for BPSD are medium, not statistically better than placebo

• Increased rate of stroke\(^2\)
• Increased mortality\(^3\)
• Increased AEs in general

\(^1\) Yury C & Fisher J, Psychotherapy and Psychosomatics 2007
\(^2\) Brodaty H et al, J Clin Psychiatry 2003
\(^3\) Schneider L, 2005
Continuing vs stopping neuroleptics in dementia patients?

- 12 months RCT
- Continuous use of neuroleptics vs placebo
- For most AD patients withdrawal had no overall detrimental effect
- Continuers – worse verbal fluency (p<.002) and higher mortality
- Subgroup of pts with more severe symptoms (NPI ≥ 15) might benefit from continued Rx

Ballard et al 2008 PLOS Medicine, 5:587-599
Analgesics

- No analgesic or low dose paracetamol → 3g/day paracetamol (n = 120, 69%)
- Full dose paracetamol or low dose morphine → 5mg bd morphine (4, 2%)
- Low dose buprenorphine or unable to swallow → buprenorphine patch 5-10μg/h (39, 22%)
- Neuropathic pain → pregabalin 25-300mg/day (12, 7%)

Husebo BS et al, BMJ, 2011;343:d4065 doi: 10.1136bmj.d0465
Psychological approaches to BPSD

• Music therapy
• Snoezelen
• ? Sensory stimulation
• Interventions that changed visual environment looked promising, but ...

... $\Rightarrow$ research required

Useful during treatment but not long term

SMILE Study
Elder clowns & LaughterBosses reduce agitation

- 20% reduction in agitation symptoms in SMILE
- Same effect size as for antipsychotic medications used to treat agitation
- Adjusting for dose, positive effects on depression & QoL
- Humour Therapy popular, now
- > 70 NHs paying for this

Innovative interventions

• Pets – some evidence, but few articles with small sample sizes. Short duration of effect
• Robotic pets – under trial
• Dance therapy – under trial
Environmental evidence

- Good evidence for
  - Optimising stimulation (noise, light)
  - Wander garden with staff interaction
- Moderate evidence for
  - Small unit size
  - Engagement with ordinary ADLs
- No good evidence for
  - Signage, display personal memorabilia

Fleming R – www.dementiaresearch.org.au
Effects of DCM & PPC on CMAI

Chenoweth L et al. Lancet Neurology 2009
Family caregivers

• Family carers as therapists for people living in the community
• Systematic review
  – ES 0.34 for decreasing BPSD
  – ES 0.15 for decreasing caregiver “stress”

Summary ... d’oh!

- Drug treatments limited benefit and → side effects – yet 30% of residents in Australia are on antipsychotics and half on ≥1 psychotropic
- Most drug Rx given without required consent\(^1\)
- Psychosocial and environmental therapies beneficial with effect size ≥ drug Rx

Rendina N et al, IJGP, 2009
Summary ... d’oh!

• So why are nursing homes not engaging more?
• Why is the knowledge not being translated into practice?
  – Training – too little?
  – Cost – too much?
  – Time – not enough?
  – Residents, families, system??
How to make good care *Practice As Usual*?

- Incentives for owners, managers, staff
- Accreditation standards
- Drive demand – families, residents
- Demonstrate cost effectiveness
- Publicise, communicate
Practical tips within facility

• Management must support and show leadership

• Incorporate psychosocial strategies into care plans
  – include assistant nurses as well as registered nurses in case conferences

• Train staff in the methods including rationale
  – experiential training may work better

Courtesy of A/Professor Lee-Fay Low
Practical tips

• Have regular visits/phone calls from a mentor/consultant/specialist to reinforce application of strategies and provide ongoing advice
• Have a staff member champion the cause
• Monitor outcomes and feedback to staff (e.g. for psychotropic medication or goal setting in care plans)

Courtesy of A/Professor Lee-Fay Low
Conclusions

- BPSD common
- Drugs have limited effects but AEs
- Psychosocial treatments have \( \uparrow \) evidence
- Problem is implementation
- Practical suggestions for working with facilities
- Need policy recognition too – accreditation standards, government policy, research support
Thank you

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