

Management of urinary incontinence in a patient with Alzheimer's Disease

Adrian Wagg

Capital Health Research Professor of Healthy Ageing
Professor of Continence Studies, University of Gothenburg



GCRC
Gothenburg Continenence Research
Centre

Statement of interest

Financial:

Either I or my institution has received funding for research, consultancy or speaker honoraria from:

Astellas Pharma

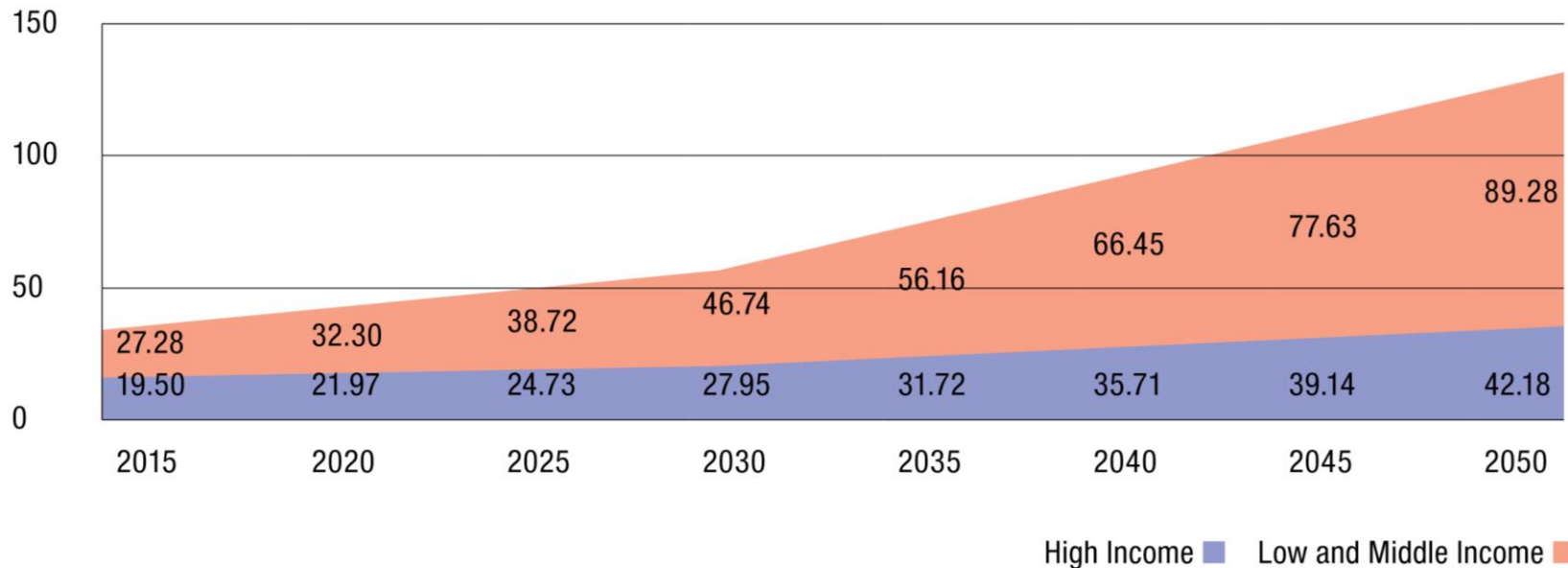
Pfizer Corp

SCA (now Essity) AB

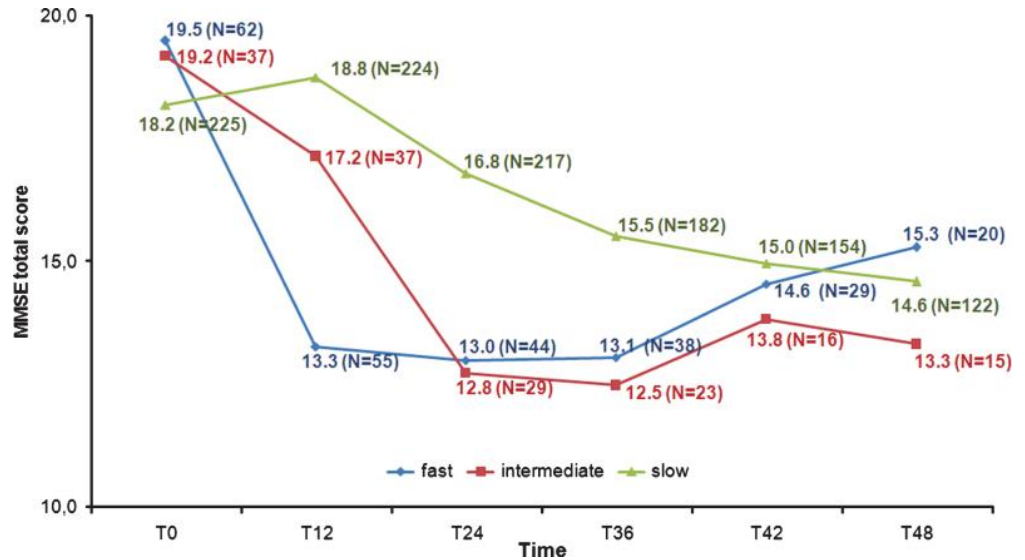
Alzheimer's Disease

- An estimated 40 million people, mostly older than 60 years, have dementia worldwide
- Projected increases are proportionally much higher for developing countries with young populations than for western Europe and the USA
- The prevalence of dementia before age 50 is less than 1 per 4000 - 30% of cases being attributed to Alzheimer's disease

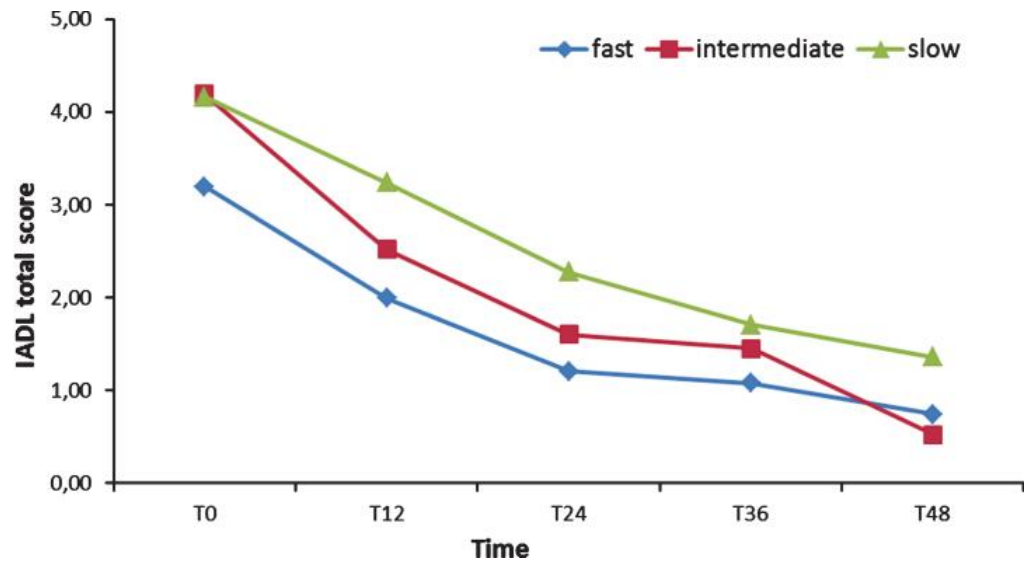
The growth in numbers of people with dementia (millions) in high income (HIC) and low and middle income countries (LMIC)



- memory loss
- slower thinking speed
- problems with understanding
- planning
- judgement
- language
- Loss of ADL

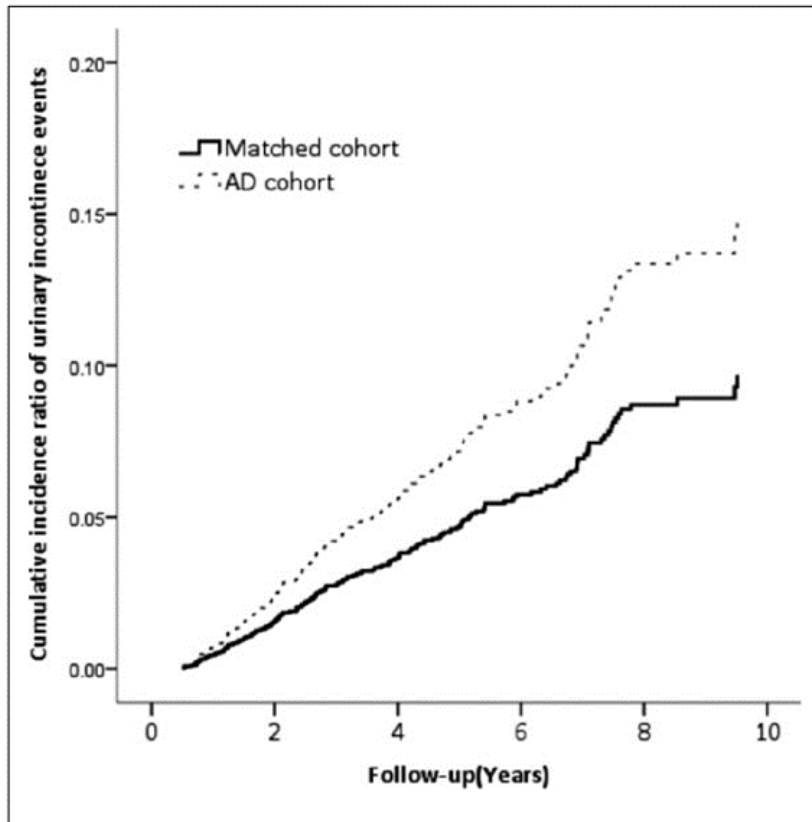


Decline in MMSE



Decline in ADL

Incontinence is more common in persons with dementia than without



Primary care incidence rates of first diagnosis per 1,000 person-years at risk (95%CI) for urinary incontinence in dementia

Men 42.3 (40.9-43.8)

Women 33.5 (32.6-34.5)

Associated with

- greater impairment of cognition & function
- frontal lobe disease

Am J Alzheimers Dis Other Demen. 2017 Feb;32(1):51-55.

Age and Ageing 2009 38:333 -338

Journal of the American Geriatrics Society 1990;38: 440-445.

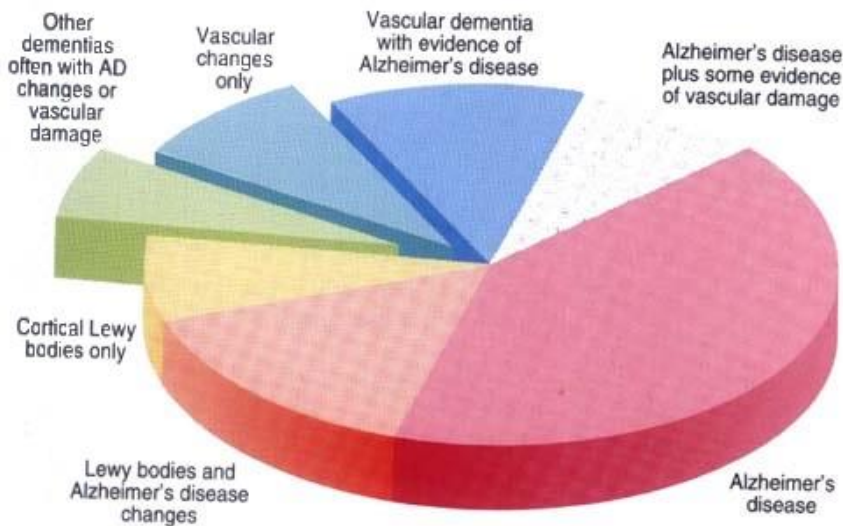
PLoS medicine. 2013 Aug;10(8):e1001505.

Dementia



In the UK, approximately 50% of people with dementia have been diagnosed

Challenges related to the provision of continence care are sometimes linked to the way that incontinence and dementia are perceived



Point 1

- A dementia diagnosis should not preclude access to any UI treatment

- The majority of people with a dementia diagnosis living in the community can potentially be managed in a similar way to any other community dwelling adult, in line with current guidelines.
- The expectations of both patient and caregiver, the nature of the proposed treatments and likelihood of benefits and harms should be taken into account

Behavioural matters

- People with dementia sometimes consider attempts from their caregivers to assist with toileting unacceptable or may react aggressively.
- Other behaviours include voiding in inappropriate places, refusing to wipe, putting used toilet paper in inappropriate places and handling faeces
- Despite difficulties managing, caregivers sometimes feel that it is their personal responsibility to provide care and to manage on their own

Journal of Integrated Care 2009; 17:15–25.

BMC Geriatrics 2012; 12:1–10

British Journal of Community Nursing 2012; 17: 125–131.

Ability to learn may be the most important factor...

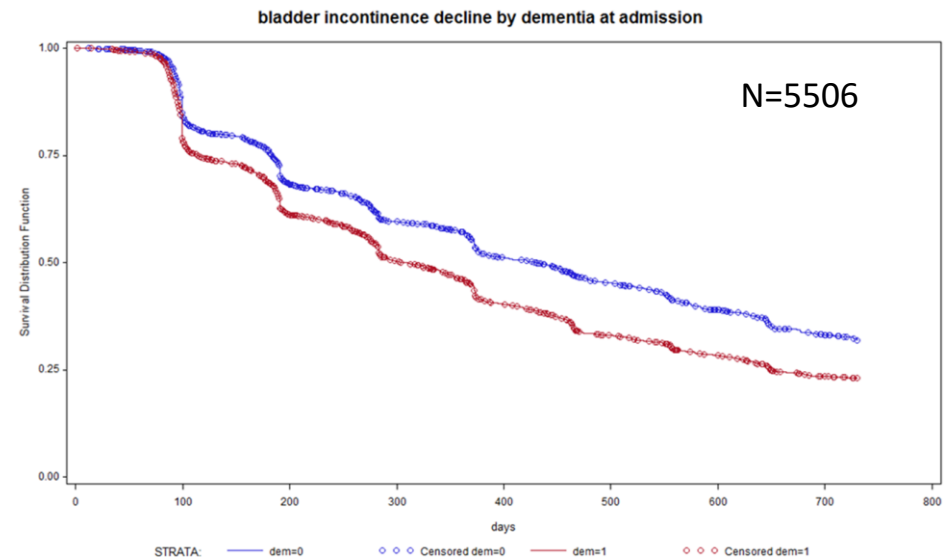
- Prompted voiding
- Individualized toileting
- Lifestyle changes
- Urine alarms

Small studies – limited evidence

Appl Nurs Res 1991;4:188–91.
J Appl Behav Anal 1997;30:153–6
Res Nurs Health 2001;24:1–8.
J Wound Ostomy Continence Nurs 2002;29:252–65.
Res Dev Disabil 2011;32:1998–2004.
BMC Geriatr 2012;12:77

along with mobility and physical function...

- Persons with dementia are at significant risk of developing incontinence
 - if hospitalised, increasing in association with increasing LoS
 - if institutionalised

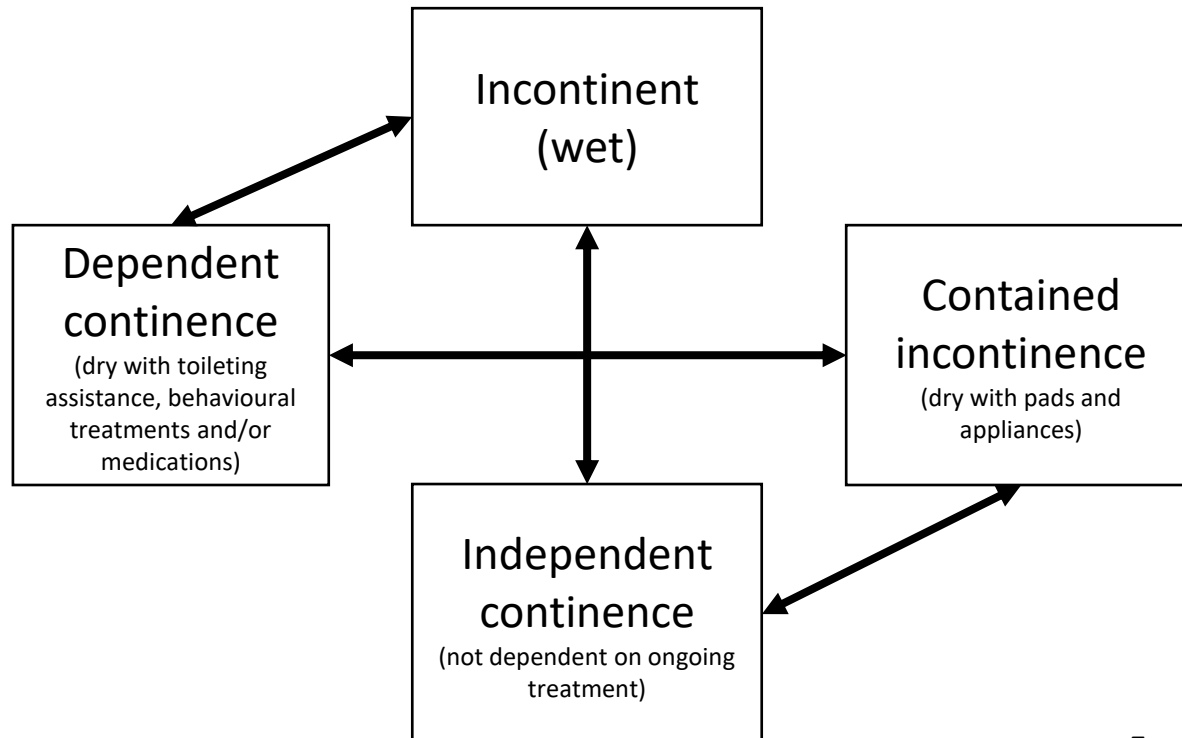


Collegian. 2016;23(1):79-86.

Hunter, Wagg et al. AADI, Toronto 2016

Point 2

- Engage with the multiprofessional team to manage UI
 - Consider the “ability to successfully toilet” as the ultimate aim



Bladder AM

- Cohort study in 147 hospitalised older patients which examined the association of anticholinergics and delirium found no increased likelihood of developing delirium in those with either possible (OR 0.33 (95%CI 0.1 – 1.03)) or definite anticholinergic medications (OR 0.43 (95% CI = 0.11-1.63))
- There is a single case report of delirium related to solifenacin treatment which resolved following a switch to darifenacin
- 2 reports of hallucinations associated with tolterodine treatment, both in cognitively intact patients
- As a class, drugs with anticholinergic properties can precipitate delirium in older people, particularly when the anticholinergic load is changed

Journal of the American Geriatrics Society. 2011;59 Suppl 2:S277-81.

General hospital psychiatry. 2013 Nov-Dec;35(6):682 e3-4.

N Engl J Med. 2003 Dec 4;349(23):2274-5

Psychiatr Serv. 2004 Nov;55(11):1318-9.

Journal of psychiatric research. 2012 Oct;46(10):1339-45.

Use AM with caution therefore

- In persons at increased risk for
 - cognitive deterioration
 - delirium
- There are no studies which directly address the efficacy of drug treatment of incontinence in those with dementia diagnosis.

AD treatment may increase the risk of UI

- randomized controlled clinical trials of ChEI use did not indicate an increased risk of UI
- Case reports of UI associated with donepezil treatment, suggesting that this ChEI may increase UI risk.
- 197 AD patients from a US memory clinic showed a significant change towards more incontinence after 26 weeks of treatment with donepezil or rivastigmine.
- data about rivastigmine or galantamine use from 3358 Dutch patients, during several years of follow-up, did not show evidence of an increased risk of UI following prolonged use

Lancet 2000; 356: 568.

J Am Geriatr Soc 2007; 55: 800–1.

Arch Intern Med 2005; 165: 808–13

Pharmacoepidemiol Drug Saf. 2015 Mar;24(3):276-85.

J Clin Psychopharmacol. 2014 Dec;34(6):722-7

AD treatment and bladder AM

- use of ChEIs was associated with a 55% increase in the risk of being prescribed a urinary anticholinergic in a population based study using administrative health data
- Concomitant use is common

Treatment with trospium and galantamine resulted in no cognitive decline and improved continence outcomes

In higher-functioning NH residents, dual use of ChIs and bladder anticholinergics may result in greater rates of functional decline than use of ChIs alone.

Arch Intern Med 2005; 165: 808–13

J Clin Psychopharmacol. 2014 Dec;34(6):722-7

J Nutr Health Aging. 2009 Oct;13(8):672-6

J Am Geriatr Soc. 2008 May;56(5):847-53

Point 3

- Antimuscarinic medication should be used with caution in those with impaired cognition and attention paid to the overall anticholinergic load of medications the patient is taking.

Summary

- A dementia diagnosis should not preclude access to any UI treatment
- Engage with the multiprofessional team to manage UI. Consider the “ability to successfully toilet” as the ultimate aim
- Antimuscarinic medication should be used with caution in those with impaired cognition and attention paid to the overall anticholinergic load of medications the patient is taking