Dementia assessment – timing is everything

Strategies for early, unprompted assessment are not supported by current evidence

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In recent years there has been increasing recognition that the diagnosis of dementia in later life is often made late or not at all [1, 2]. Currently there are major pressures for early diagnosis, including politically, from third sector organisations and patient representative groups, and the pharmaceutical industry [3]. There are many plausible benefits from such an approach, including rational planning of medical treatment and support of patients and their carers. However, it is important to consider what evidence exists to support early diagnosis of dementia.

There were initial hopes that identification of a pre-dementia syndrome such as mild cognitive impairment (MCI) would enable targeted treatment to delay or prevent dementia. However, there are major problems in reliably identifying which older people with mild cognitive problems will progress. The annual conversion rate from MCI to dementia is low (5-10%) and the majority of people with MCI will not progress to dementia even after 10 years of follow-up [4]. There is substantial research interest in the use of biomarkers to improve the prediction of incident dementia (e.g. cerebrospinal fluid protein assays, structural and functional imaging). However the enthusiasm and optimism around use of diagnostic biomarkers must be tempered by the current limited evidence; clinical utility has not yet been demonstrated [5]. Furthermore there are no medical treatments or approaches to care that have been shown to prevent cognitive decline in those with early dementia or pre-dementia syndromes such as MCI; this includes interventions which aim to minimise the vascular component of cognitive decline, such as antithrombotics, antihypertensive agents and statins [6, 7, 8] and treatments targeting the neurochemical abnormalities underlying Alzheimer’s disease, such as with acetylcholinestase inhibitors [9].

It is argued that modifiable lifestyle risk factors for dementia (such as smoking, excessive alcohol consumption, lack of exercise, and diet and obesity) should be reviewed in patients with MCI, and if appropriate, actively managed with the aim of preventing cognitive decline [10]. These lifestyle factors are important risks for both
Alzheimer pathology and cerebrovascular disease, the two main underlying causes of dementia in older people [11]. However these lifestyle issues are relevant for all older people, not just those with early dementia or MCI, with the potential for substantial gains from lifestyle change including improved mood, physical function and prevention of many diseases of older age [12].

Summaries of the available literature on diagnosis are provided in a recent systematic review [13], in the World Alzheimer Report from 2011 [14] and in NICE guidance [10]; all conclude that there is at present no good evidence to justify population screening and routine attempt at early diagnosis of dementia. There are also a number of risks from adopting such an approach, including diverting scarce health care resources from other activities [15].

However there is a strong argument to support ‘timely’ diagnosis of dementia. This approach includes case finding triggered by social difficulties or breakdown, or patient / carer concerns associated with cognitive impairment, behaviour change or functional difficulties.

Diagnosing dementia is potentially a complex and time-consuming task. Guidelines recommend that a diagnosis should be based on specialist multidisciplinary assessment, informed by history taking from patient and family (including use of prescribed and over-the-counter drugs that may adversely affect cognitive function) and in some cases the use of supportive imaging, neuropsychology and laboratory testing [10, 16]. Given that specialist psychiatry of old age services are stretched, in practice in the UK there is a two stage approach: initial screening by a non-specialist with onward referral of those who screen “positive”. However there are numerous gaps in knowledge of what the optimal processes of assessment should be; this includes major uncertainty about how best to screen and assess for dementia, particularly in the context of acute illness, when delirium is an important and common confounder. Attempts by teams such as the Cochrane Dementia and Cognitive Impairment Group to provide systematic review of the evidence for screening and assessment of dementia are ongoing and it is hoped that this work will improve clinical practice.

Concerns have been raised that giving a diagnosis of dementia could have adverse psychological effects for patient and family. Although evidence is limited, when a diagnosis of dementia is given to patients and carers in a properly prepared and supported manner, this does not cause persisting distress [17]. Diagnosis often confirms existing suspicions of family carers, although the majority of patients are unaware of the possibility of dementia [18].

When dementia is confirmed, a number of symptomatic treatments and approaches to care should be considered including acetylcholinesterase inhibitors, cognitive stimulation and care plans which focus on maximising independence in activities of daily living, as summarised by NICE guidance [10].

Dementia in older age is frequently accompanied by other problems. Anxiety and depression are very common and important to recognise; psychological and pharmacological interventions can give benefits and should be considered [10].
In addition many patients with dementia present with geriatric syndromes, including poor mobility, falls, incontinence, undernutrition, and delirium with acute illness. In these contexts specialist multidisciplinary elderly assessment and care (sometimes called comprehensive geriatric assessment; CGA) has an important role. There is strong evidence for benefit from such an approach. Frail older adults in hospital who receive CGA have reduced mortality, are more likely to returning to live in their own home, have reduced risk of placement in long term care and have improved cognition compared to those who receive general medical care [19]. For frail community-dwelling older people, CGA-type care reduces the risk of falls and of care-home or hospital admission [20]. CGA should be the routine standard of care for frail older people, including those with dementia, both in hospital and in community settings.

In conclusion, at present the available evidence supports case finding and diagnosis of dementia, triggered by problems such as social breakdown, or patient / carer concerns. There are a number of proven effective management strategies to help patients and families cope with the problems associated with this devastating condition. However at present there is no good evidence to support attempts at early diagnosis, before such problems have occurred.

References


