08 - Vascular dementia (VaD)

Vascular dementia (VaD)

Prescribing in older people CHAPTER 6 24.0% and 31.4% of treated individuals, respectively.113,114 Donanemab is, at the time of writing, undergoing a full evaluation by the FDA and NICE. The development of three monoclonal antibodies, gosuranemab, tilavonemab and zagotenemab, was terminated due to negative results. A phase II study of semorinemab, an anti--tau monoclonal antibody, was negative. While semorinemab had a significant effect on cognition measured by the ADAS-Cog11, this effect did not extend to improved functional or global outcomes.115 Further exploration is required. Clinical trials of anti-tau vaccines are underway. In addition to the above, results of recent trials of solanezumab, crenezumab and gantenerumab were all negative. Vascular dementia (VaD) Vascular dementia comprises 10–50% of dementia cases and is the second most common type of dementia after AD. It is caused by ischaemic damage to the brain and is associated with cognitive impairment and behavioural disturbances. The management options are currently very limited and focus on controlling the underlying risk factors for cerebrovascular disease.116 Note that it is impossible to diagnose with certainty vascular or Alzheimer's dementia and much dementia has mixed causation. This might explain why certain AChE-Is do not always provide consistent results in probable VaD and the data indicating efficacy in cognitive outcomes were derived from older patients, who were therefore likely to have concomitant AD pathology.117 None of the currently available drugs is formally licensed in the UK for VaD. The management of VaD has been summarised.118,119 Unlike the situation with stroke, there is no conclusive evidence that treatment of hyperlipidaemia with statins or treatment of blood clotting abnormalities with acetylsalicylic acid has an effect on VaD incidence or disease progression.120 Similarly, a Cochrane review found that there were no studies supporting the role of statins in the treatment of VaD.121 A Cochrane review of cholinesterase inhibitors for VaD and other vascular cognitive impairments found moderate- to high-certainty evidence that donepezil 5mg, donepezil 10mg and galantamine 16–24mg have a slight beneficial effect on cognition in people with vascular cognitive impairment, although the size of the change is unlikely to be clinically important. Donepezil 10mg and galantamine 16–24mg are probably associated with more adverse events than placebo. The evidence for rivastigmine was less certain. Data suggest that donepezil 10mg has the greatest effect on cognition, but at the cost of adverse effects. The effect is modest, but in the absence of any other treatments, these agents may be considered in people living with vascular cognitive impairments. Further research into rivastigmine is needed, including the use of transdermal patches.122 A meta-analysis of RCTs found that cholinesterase inhibitors and memantine produce small benefits in cognition of uncertain clinical significance and concluded

that data were insufficient to support widespread use of these agents in VaD; the effect is lower than that seen in AD, although no direct comparison has been made.116 A systematic review and Bayesian network meta-analysis comparing the efficacy and safety of cognitive enhancers for treating vascular cognitive impairment found significant efficacy for donepezil, galantamine and memantine on cognition. Memantine was found to provide significant efficacy in global status. They were all safe and well tolerated.123

Revision #1
Created 2026-01-04 20:16:56 UTC by Omar Ayman
Updated 2026-01-04 20:16:56 UTC by Omar Ayman