studies=9; global model), including the pre-specified subgroups of elective surgery, emergency surgery, hip fracture, and other major non-cardiac operations. Unlike dexmedetomidine, corticosteroids were not effective at preventing delirium after cardiac surgery (odds ratio 0.76, 0.34 to 1.58; n=4165; studies=3). Melatonin receptor agonists (odds ratio 0.34, 0.14 to 0.89) and olanzapine (0.26, 0.08 to 0.91) were effective in elective orthopaedic surgery. Intranasal insulin was effective for elective abdominal surgery (odds ratio 0.12, 0.02 to 0.54), and parecoxib was effective for hip fracture (0.28, 0.10 to 0.76) and other major non-cardiac surgery (0.35, 0.15 to 0.77).

In sensitivity analysis excluding studies at high risk of bias, dexmedetomidine (odds ratio 0.46, 95% CrI 0.36 to 0.57) and corticosteroids (0.53, 0.31 to 0.87) remained effective. The surgical specialty specific findings for melatonin receptor agonists, parecoxib, olanzapine, and intranasal insulin also remained effective. Data on anaesthesia type were available for 95% (150/158) of trials. **Overall, the type of anaesthesia used (general or regional) was not an important moderator of the treatment effect estimates.**

The correct answer is 4.

Reference: Luney M, Holdsworth L, Hagana A, Kaminskaite V, Qiu L, Berner J, et al. Effectiveness of drug interventions to prevent delirium after surgery for older adults: systematic review and network meta-analysis of randomised controlled trials. BMJ. 2026 Feb 12;392:e085539. doi: 10.1136/bmj-2025-085539. Erratum in: *BMJ*. 2026 Mar 13;392:s496.
Link: https://www.bmj.com/content/392/bmj-2025-085539
PMID: 41690769

Q24 Obstructive Sleep Apnea

Which *one* of the following statements about obstructive sleep apnea (OSA) is *false*?

- ❍ 1. It affects up to 40% of men aged 50 years and older.
- ❍ 2. Portable monitors are not useful for first-line diagnostic testing.
- ❍ 3. Using a mandibular advancement device may be a reasonable alternative to positive airway pressure therapy for those with mild to moderate OSA.
- ❍ 4. Uvulopalatoplasty can be offered if adherence to or efficacy of CPAP is low.

Educational Point: Obstructive sleep apnea (OSA), a complete or transient breathing cessation lasting 10 seconds or longer, is caused by obstruction of the upper respiratory tract. **Although estimates vary, OSA affects up to 40% of men aged 50 years and older** and one-fifth of the postmenopausal population.

Polysomnography (level 1) is the accepted standard for the evaluation of sleep-disordered breathing, including OSA. The presence and severity of OSA are determined by the apnea-hypopnea index (AHI), which expresses the number of events per hour. **Portable monitors, with high sensitivity (79%) and specificity (79%), allow for in-home sleep testing, which is frequently used for first-line diagnostic testing.** Level 1 is reserved for severe cases or for patients with critical comorbidities. For patients with a high pretest probability, a negative home sleep test result should be followed by level 1 polysomnography, if available, or repeated in-home testing. Sleep tests may need to be repeated, particularly if symptoms change, which can happen with age, development of new comorbidities or worsening of existing ones, and changes in weight.

Whether patients should wear their dentures at night is a common and important question in the context of OSA. The current literature tends to support that such a decision should be made on an individual basis, with some recent data showing no major overall difference. However, sleeping with dentures was associated with greater daytime sleepiness for some, while for others, sleeping without dentures was associated with better breathing probably due to a different anatomic airway configuration and length, as shown by 3-dimensional imaging. More research is needed to reach a conclusion on this issue.

Using a mandibular advancement device (MAD) is the second choice after positive airway pressure (PAP) therapy for patients with mild or moderate OSA or for those who cannot tolerate PAP therapy. Several randomized controlled trials have compared the efficacy of MAD to continuous positive airway pressure (CPAP) (as standard of care). A meta-analysis showed that both treatments decreased the AHI (apnea-hypopnea index) and the oxygen desaturation index compared to controls, although MAD was less effective than CPAP. Nevertheless, using a MAD may be a reasonable alternative PAP