Jumpstarter

Anesthesia and Dementia

Access downloadable resources to jump-start your search on the use of anesthesia in older adults and those living with dementia. Use the tools and the research articles as a basis for questions you might ask your doctor or surgical team.

While exploring the resources, keep in mind that delirium, which often occurs after surgery in older adults, is different from cognitive decline and dementia. In order to achieve good outcomes, it is important to know ahead of surgery whether a person has a diagnosis of dementia so it can be determined if they are at a higher risk for delirium. Older adults are more sensitive to anesthetic agents and generally require smaller doses for the same clinical effect. Drug action is usually prolonged.

Resources

2019 Updated AGS Beers Criteria for potentially inappropriate medication in older adults
Benzodiazepines should typically be avoided for persons living with dementia, but may be recommended in the U.S. for periprocedural anesthesia [occurring soon before, during, or soon after surgery]. See Table 2, page 680.

Alzheimer's disease and surgery
Atlanta, GA: WebMD.
Covers the issues to consider when deciding about surgery, questions to ask before surgery, sedation, what to expect from the surgery, after surgery, problems to watch for, pain and follow-up care.
https://www.webmd.com/alzheimers/alzheimers-surgery#1

Anesthesia for older people with dementia
Kingston, ACT, Canberra: Dementia Australia LTD.
Family members often report that the person living with dementia is not the same after anesthesia. This sheet from the Australian government describes the different types of problems that may occur.
Anesthesia facts for non-medical people: anesthesia medications
Richard Novak
The personal web site of a board certified anesthesiologist who writes about common anesthesia medications used in the U.S. today.
https://theanesthesiaconsultant.com/anesthetic-medications

Decisions about surgery
Melbourne, AU: BetterHealth Channel, Victoria State Government
A general tip sheet about making your own decisions, questions to ask the surgeon, consenting to treatment, and where to get help.

Drugs used for anesthesia
Dallas, TX: Drug.com.
A compendium of drug names ranked by “popularity” calculated from the web site, Drugs.com, not by usage in surgery. Provides a link to the drug with a description of drug, important information, side effects, and other drugs that will affect the anesthetic.
https://www.drugs.com/condition/anesthesia.html?category_id=&include_rx=true&include_otc=true&show_off_label=true&submitted=true

Geriatrics (anesthesia text)
This technical information covers changes associated with aging, heart, lungs, liver, kidneys, and blood pressure, and their implications and research related to surgery. Additionally it addresses management during surgery (perioperative), regional versus general anesthesia, pain, mental status, and recovery from anesthesia.
http://www.openanesthesia.org/geriatrics_anesthesia_text/

Optimal perioperative management of a geriatric patient: best practices/guidelines from ACS NSQIP/
Chicago, IL: American College of Surgeons.
Provides all-in-one guidelines for pre-, intra-, and postoperative management of geriatric patients, transition to care following surgery, tools for developing treatment plans, and more.
Seniors and anesthesia.
Schaumburg, IL: American Society of Anesthesiologists (ASA)
Covers types of anesthesia, risks to older adults, cognition and how to reduce
risks of confusion after surgery (practical tips and with the care team), and the
qualifications of the anesthesiologists you should expect.
https://www.asahq.org/whensecondscount/wp-

Anesthesia Research

Evered L; Silbert B; Knopman DS; et al. Recommendations for the nomenclature of
cognitive change associated with anaesthesia and surgery – 2018. Anesthesiology. Nov
2018; vol. 129(5), pp. 872-879.
Full-text: https://anesthesiology.pubs.asahq.org/article.aspx?articleid=2707390

Funder, KS; Steimmetz LSR. Anaesthesia for the patient with dementia undergoing

Hussain M; Berger M; Eckenhoff RG; et al. General anesthetic and the risk of dementia
in elder patients: current insights. Clinical Interventions in Aging. Sep 24, 2014; vol. 9,
pp. 1619-1628.
Full-text: https://www.ncbi.nlm.nih.gov/pubmed/25284995

vol. 11(4), pp 175-177.
Full-text: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2552979/

Kumar CM; Gopal L; Seet E. Choosing anesthesia for cataract surgery in patients with
pp. 81-84.
Full-text: https://www.ncbi.nlm.nih.gov/pubmed/31057246

Morandi, A; Davis D; Bellelli G; et al. The diagnosis of delirium superimposed on
dementia: an emerging challenge: Journal of the American Medical Directors
Full-text: https://www.ncbi.nlm.nih.gov/pubmed/27650668

Needham MJ; Webb CE; Bryden DC. Postoperative cognitive dysfunction and
dementia: what we need to know and do. British Journal of Anesthesia. Dec 1, 2017;
vol. 119(suppl 1), pp. i115-i125.
Full-text: https://www.ncbi.nlm.nih.gov/pubmed/29161395
Full-text: https://www.ncbi.nlm.nih.gov/pubmed/26967259

Full-text: https://www.ncbi.nlm.nih.gov/pubmed/23220565

Vlisides P; Avidan M. Recent advances in preventing and managing postoperative delirium. *F1000Research*. May 1, 2019; 8
Full-text: https://www.ncbi.nlm.nih.gov/pubmed/31105934

Full-text: https://www.ncbi.nlm.nih.gov/pubmed/26527897

**News**

*Is surgery right for your older loved one?*
Covers special considerations for frail, chronic conditions, current medications, and mental health status.
https://health.usnews.com/health-care/patient-advice/articles/2018-06-06/is-surgery-right-for-your-older-loved-one

*Mayo Clinic study: anesthesia, surgery linked to decline in memory and thinking*
Mayo Clinic Public Release
Recent study of 2000 participants found that exposure to anesthesia after 70 was linked to long-term changes in brain function.

*New guidelines focus on improving surgery decisions for older patients*
CBS

*Will surgery sap your brain power?*
Science (AAAS - American Association for the Advancement of Science)
https://www.sciencemag.org/news/2017/05/will-surgery-sap-your-brain-power