

## **C-67 Perioperative Management of Patients Presenting with Hip Fracture: Cardiovascular Assessment and Anesthesia Planning**

**Moderator(s)/Facilitator(s):** Anis Dizdarevic, M.D., FASA

### **Objective**

***After completion of this session, the participant will be able to:***

- Formulate an anesthetic plan for the elderly patient with a hip fracture based on the cardiovascular assessment.

### **Case Stem Question**

Elderly patient presents from a nursing home with a hip fracture requiring urgent surgical repair.

How do we perform an expedited medical and cardiovascular preoperative assessment and how does it guide anesthesia care?

### **Guiding Questions for Discussion**

1. Who are the patients needing medicine consult prior to urgent hip fracture repair surgery and why?
2. How is cardiovascular risk assessment performed in expedited fashion in this patient population?
3. How does cardiovascular assessment guide perioperative anesthesia plan in hip fracture surgery?
4. What are the indications for urgent preoperative echo in elderly patients presenting with hip fracture?
5. What kind of anesthesia and analgesia is planned for surgery? When do we need invasive monitoring? What are some intraoperative issues and risks to consider?
6. How can we minimize postoperative pain and delirium?

### **References**

1. Wenk M, Frey S. Elderly hip fracture patients: surgical timing and factors to consider. *Curr Opin Anaesthesiol.* 2021 Feb 1;34(1):33-39.
2. Mclsaac DI, Harris EP, Hladkowitz E, Moloo H, Lalu MM, Bryson GL, Huang A, Joannisse J, Hamilton GM, Forster AJ, van Walraven C. Prospective Comparison of Preoperative Predictive Performance Between 3 Leading Frailty Instruments. *Anesth Analg.* 2020 Jul;131(1):263-272.
3. AbuSharar SP, Bess L, Hennrikus E. Pre-operative echocardiograms in acute fragility hip fractures: How effective are the guidelines? *Medicine (Baltimore).* 2021 Mar 26;100(12):e25151.
4. Kunutsor SK, Hamal PB, Tomassini S, Yeung J, Whitehouse MR, Matharu GS. Clinical effectiveness and safety of spinal anaesthesia compared with general anaesthesia in patients undergoing hip fracture surgery using a consensus-based core outcome set and patient-and public-informed outcomes: a systematic review and meta-analysis of randomised controlled trials. *Br J Anaesth.* 2022 Nov;129(5):788-800.

5. Neuman MD, Ellenberg SS, Sieber FE, Magaziner JS, Feng R, Carson JL; REGAIN Investigators. Regional versus General Anesthesia for Promoting Independence after Hip Fracture (REGAIN): protocol for a pragmatic, international multicentre trial. *BMJ Open*. 2016 Nov 15;6(11):e013473.