

C-21 Anesthetic Considerations for the Transgender Patient: What Do You Need to Know?

Moderator(s)/Facilitator(s): Alopi Patel, M.D.

Objective

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

- Incorporate the anesthetic considerations for the transgender patient into their anesthetic plan.

Case Stem Question

Scenario 1: A 25 year old, 90kg transgender man presents for a hysterectomy. Their past medical history is pertinent for severe gastroesophageal reflux disease (GERD), endometriosis, depression, migraines, and lower back pain. Their current medications include oral contraceptives, famotidine, sumatriptan, sertraline, cyclobenzaprine and duloxetine.

The patient states they have severe GERD when lying flat. Furthermore, the nursing team requests urine for a urine pregnancy test however the patient states that they do not want to give urine as they do not think they are pregnant. The patient eventually gives urine and the urine pregnancy test is negative. The decision is made to proceed with the surgery with rapid sequence induction (RSI) due to severe GERD. The patient is brought to the operating room by the resident and the medical student. The medical student places the monitors as the resident starts pre-oxygenating. After several minutes of preoxygenation, anesthesia is induced with cricoid pressure in place with propofol 200mg, fentanyl 150mcg, succinylcholine 100mg and lidocaine 100mg. The trachea is successfully intubated and vital signs remain stable. A few minutes later, the saturation starts to decrease gradually. Upon auscultation of the chest, it is noted that the patient is wearing a chest binder that is secured very tightly. The binder is removed by the surgical team. The patient's saturation gradually increases.

Guiding Questions for Discussion

- What further information do you need from this patient?
- What will your physical examination consist of?
- What are your perioperative anesthetic concerns?
- Would you require a pregnancy test for this patient?
- How would you proceed?
- Would you delay the case?
- Would you require a urine pregnancy test prior to proceeding?
- What is the pathophysiology of this event?
- What precautions could have been taken to avoid this?
- What perioperative considerations are routinely made based on gender?
- Is this patient at risk for other perioperative events? If so, what?

References

1. Abou-Ismaïl MY, Citla Sridhar D, Nayak L. Estrogen and thrombosis: A bench to bedside review. *Thromb Res.* 2020 Aug;192:40-51. doi:

10.1016/j.thromres.2020.05.008. Epub 2020 May 11. PMID: 32450447; PMCID: PMC7341440.

2. Kim E, Mukerji S, Debryn D, Price R, Streed C Jr, Nozari A. Oxygen desaturation in a transgender man: initial concerns and recommendations regarding the practice of chest binding: a case report. *J Med Case Rep.* 2022 Sep 4;16(1):333. doi: 10.1186/s13256-022-03527-z. PMID: 36057618; PMCID: PMC9441088.
3. Mishra P, Nath A, Kaushal A, Kain R. Gender reassignment surgery - a narrative overview of anaesthetic considerations and implications. *Anaesthesiol Intensive Ther.* 2021;53(4):343-349. doi: 10.5114/ait.2021.109446. PMID: 34714015.
4. Tollinche LE, Van Rooyen C, Afonso A, Fischer GW, Yeoh CB. Considerations for Transgender Patients Perioperatively. *Anesthesiol Clin.* 2020 Jun;38(2):311-326. doi: 10.1016/j.anclin.2020.01.009. PMID: 32336386; PMCID: PMC7197403.
5. Tollinche LE, Rosa WE, van Rooyen CD. Perioperative Considerations for Person-Centered Gender-Affirming Surgery. *Adv Anesth.* 2021 Dec;39:77-96. doi: 10.1016/j.aan.2021.07.005. Epub 2021 Sep 29. PMID: 34715982; PMCID: PMC8562883.
6. Tollinche LE, Walters CB, Radix A, Long M, Galante L, Goldstein ZG, Kapinos Y, Yeoh C. The Perioperative Care of the Transgender Patient. *Anesth Analg.* 2018 Aug;127(2):359-366. doi: 10.1213/ANE.0000000000003371. PMID: 29757779; PMCID: PMC6054537.