

Provider **BEWARE!** Reactive Airway

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Case

- 47-year-old **G3P0110** at **37w4d** by IVF presented in labor
- PMH/PSH of cHTN, GERD; **D&C** and **myomectomy**
- Prior anesthetic record: “**reactive airways with bronchitis**”—not supported by patient
 - *Recommendation to avoid Hemabate intraoperatively*
- **Primary cesarean delivery** under **combined spinal-epidural** complicated by **small bowel injury due to adhesive disease**
 - Intraoperative General Surgery consult

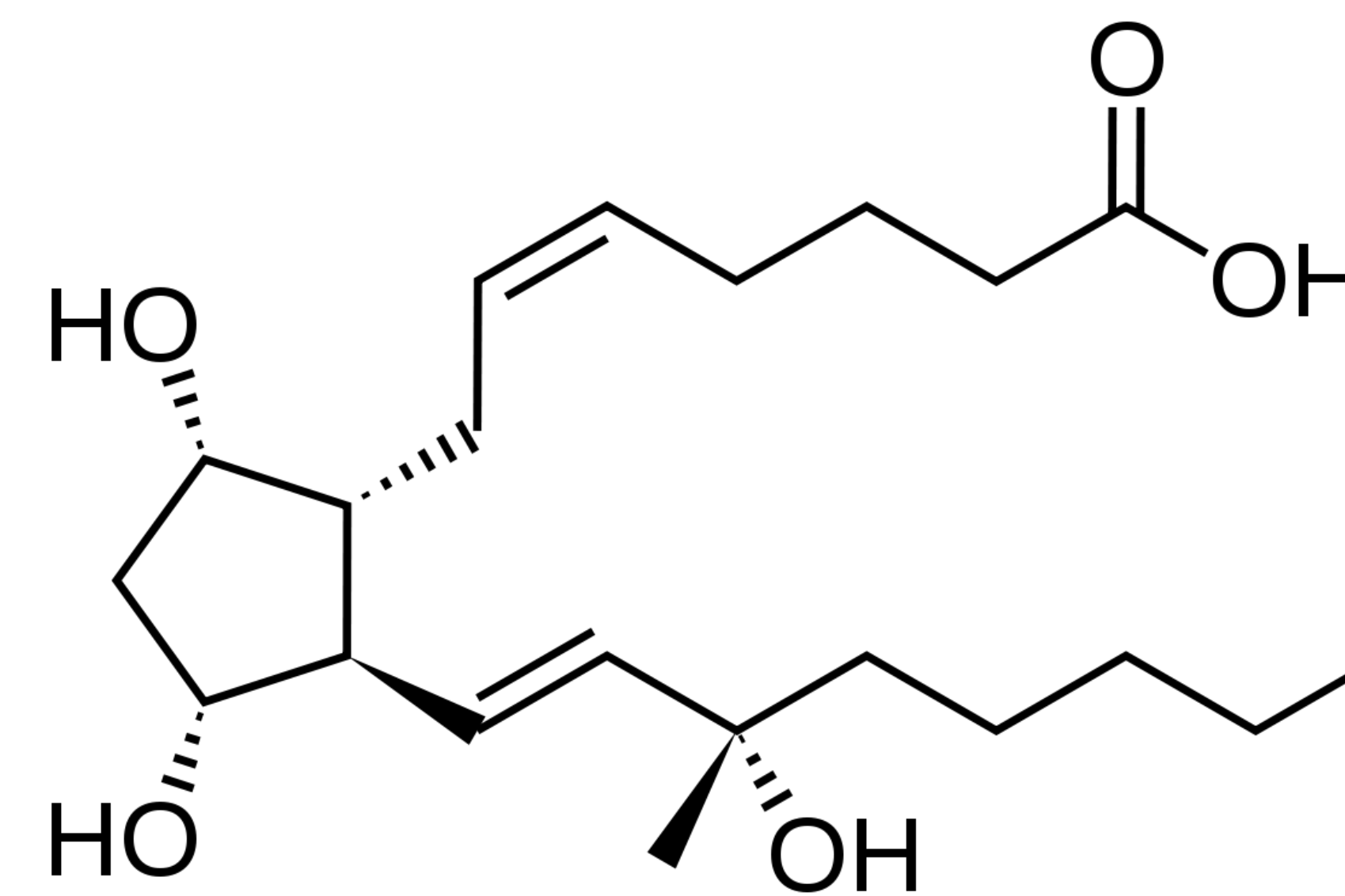
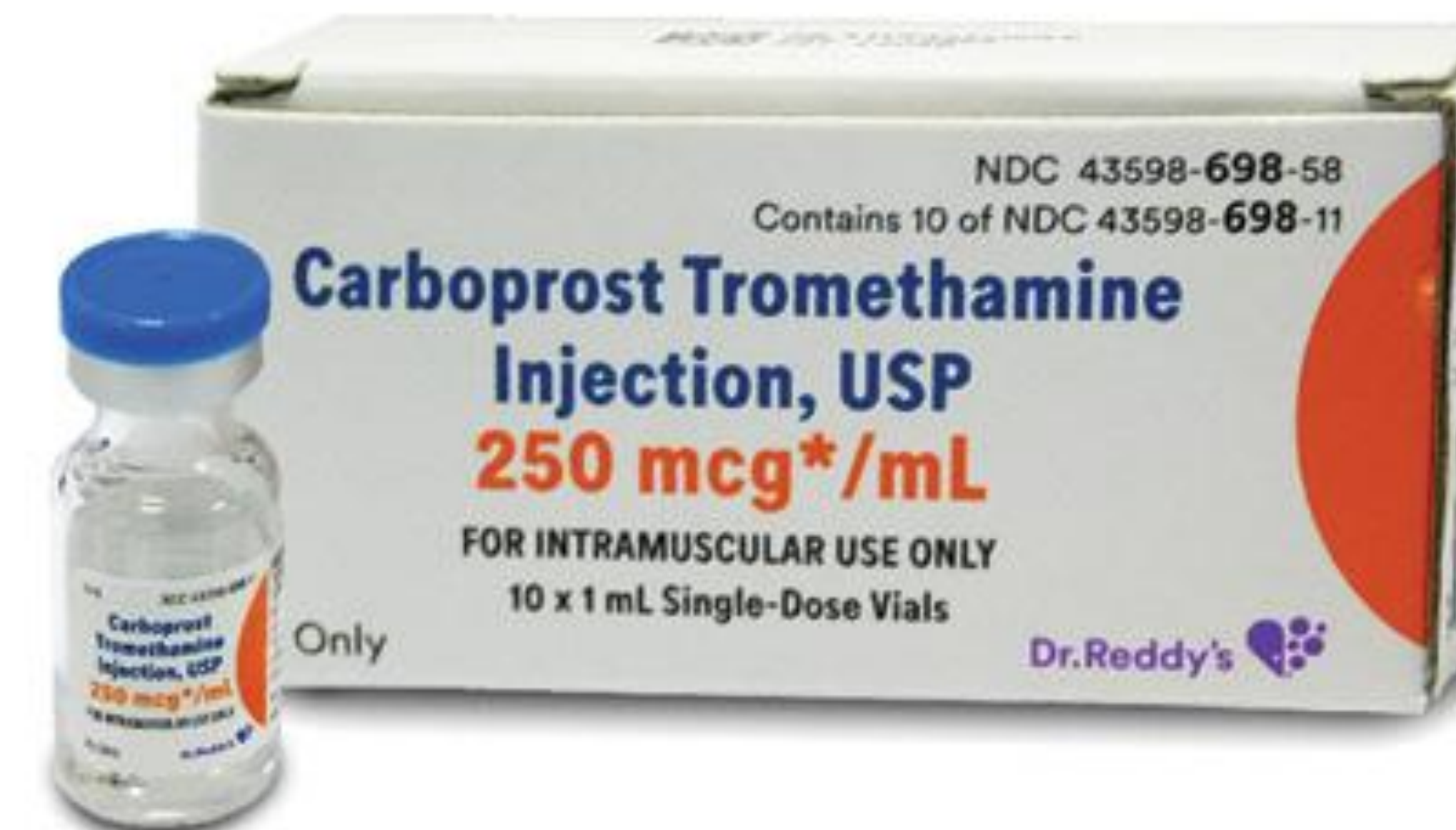
Case continued

- **Placental separation proved difficult**
 - Ultimately removed with administration of oxytocin
- **Uterine atony** persisted despite receipt of methylergonovine and misoprostol
 - **250 mcg intramuscular (IM) Hemabate**
**per surgeon request*
- ~60 minutes later, increasing tachycardia during abdominal closure
- Patient cited burning chest discomfort; no ST segment changes on EKG; lungs clear
- Repeated attempts to obtain a NIBP reading unsuccessful (patient remained awake with stable EtCO2 tracing)
- Deteriorating mentation; uncooperative for arterial line placement
 - **Conversion to general anesthesia in the setting of acute delirium**
 - Intubated after rapid sequence induction with EtCO2 47 mmHg immediately after
 - Diffuse wheezing noted in bilateral lungs fields—resolved after receipt of albuterol
- Taken to the ICU: PPH of 2.3L with Bakri balloon placement, bowel resection and presumed bronchospasm
 - Extubated on POD 1
 - Discharged home on POD 5

Discussion

- Carboprost tromethamine (Hemabate):** synthetic analog of prostaglandin $F_{2\alpha}$
 - Indications: second-line uterotonic, pregnancy termination
 - Peak plasma concentrations within 15-60 minutes after IM injection
 - Known side-effects: pyrexia, flushing, nausea, vomiting, diarrhea, myalgia
 - Two case reports of bronchospasm occurring in a non-asthmatic patient and a neonate**

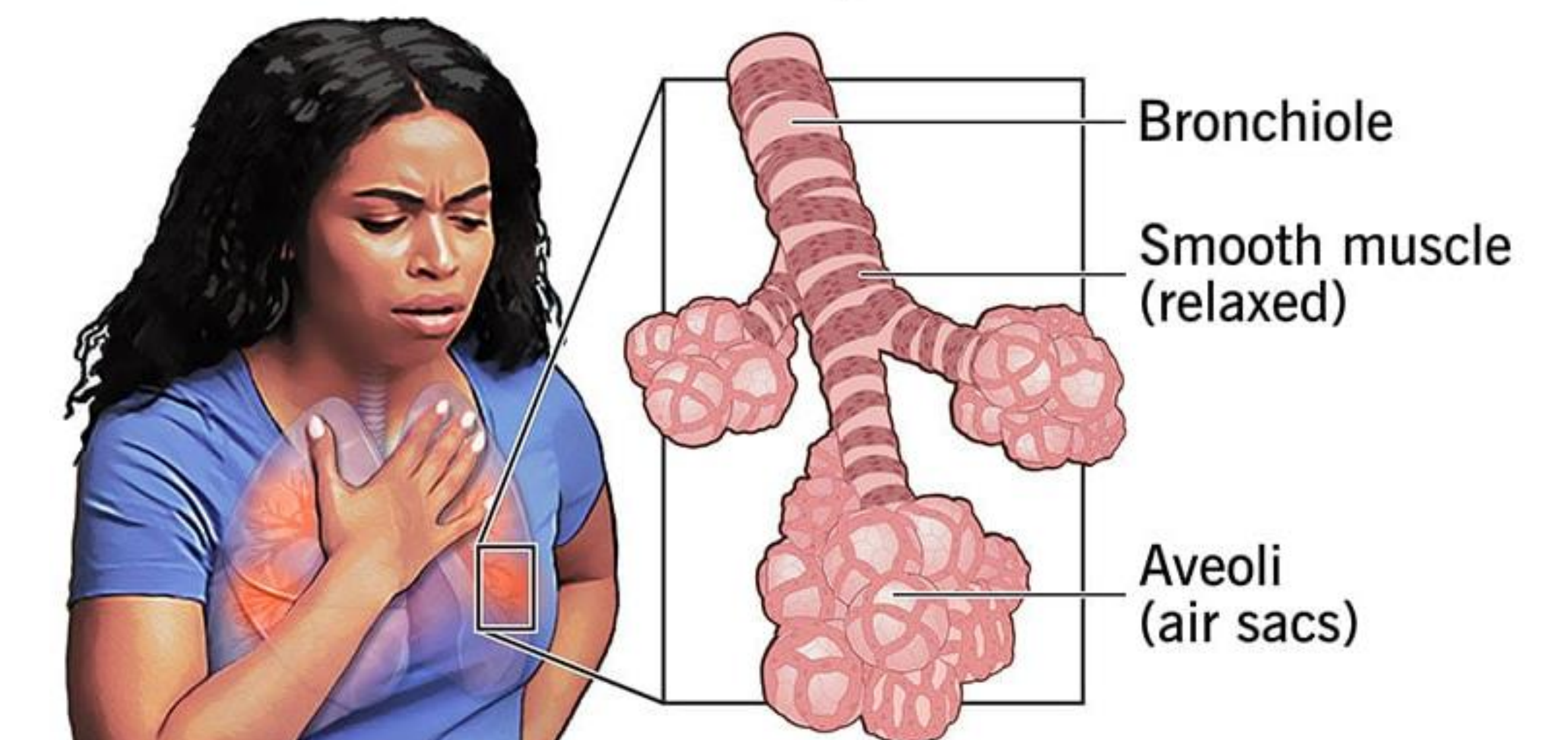
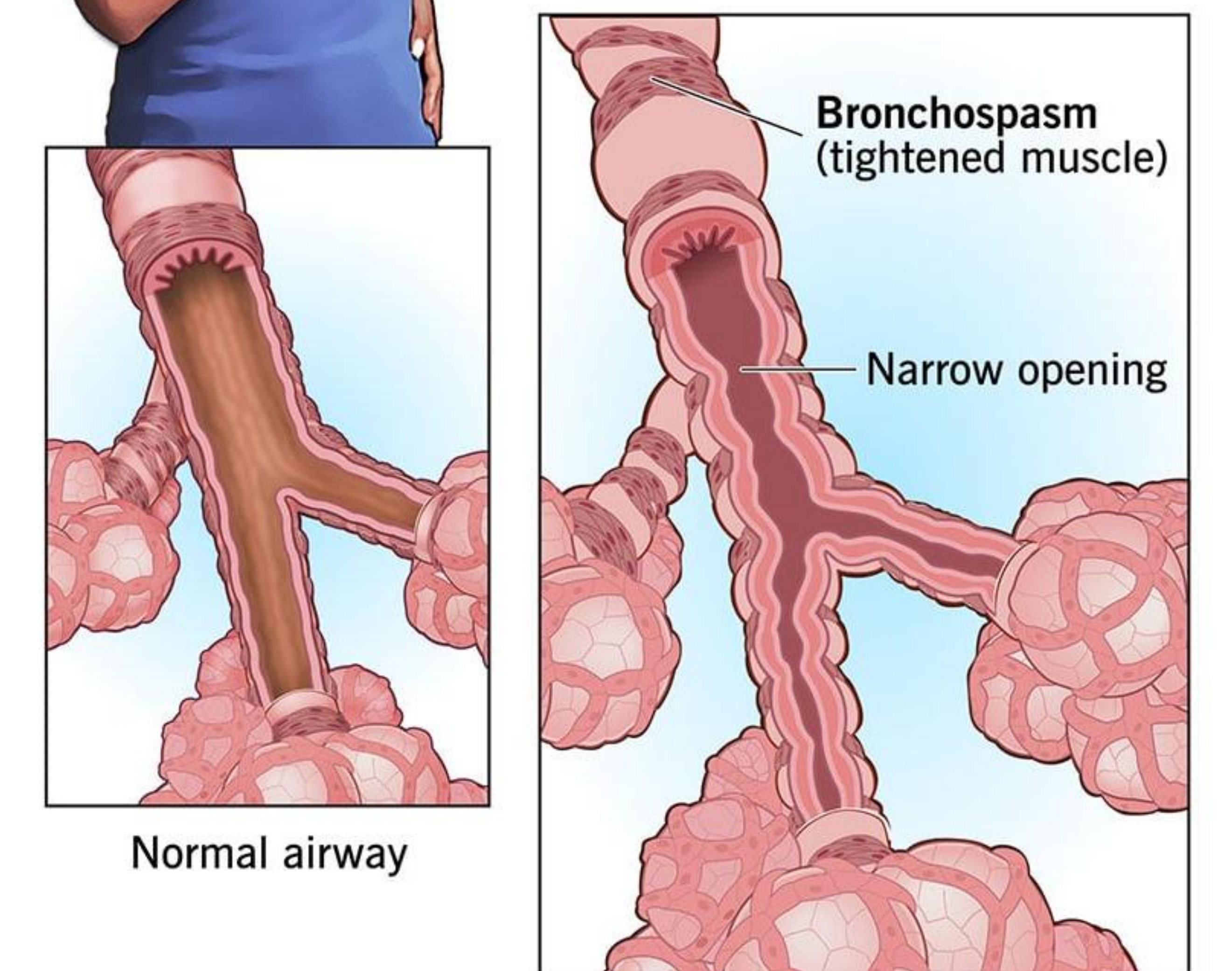
**Always ask again—patient, surgeon, yourself.
Use only if you must.**



References

- Cooley DM et al. (1991) *Anesth Analg.* 73(1):87-9
- Harber CR et al. (2007) *BJOG.* 114(3):366-8
- Mrvos R et al. (1999) *J Toxicol Clin Toxicol.* 37(7):865-7

Bronchospasm



Normal airway

Constricted airway