

Urgent Cesarean Section for Parturient with Acute Decompensated Heart Failure

Kyle Sullivan MD, Taylor L. Watkins MD, Matthew D. Read MD

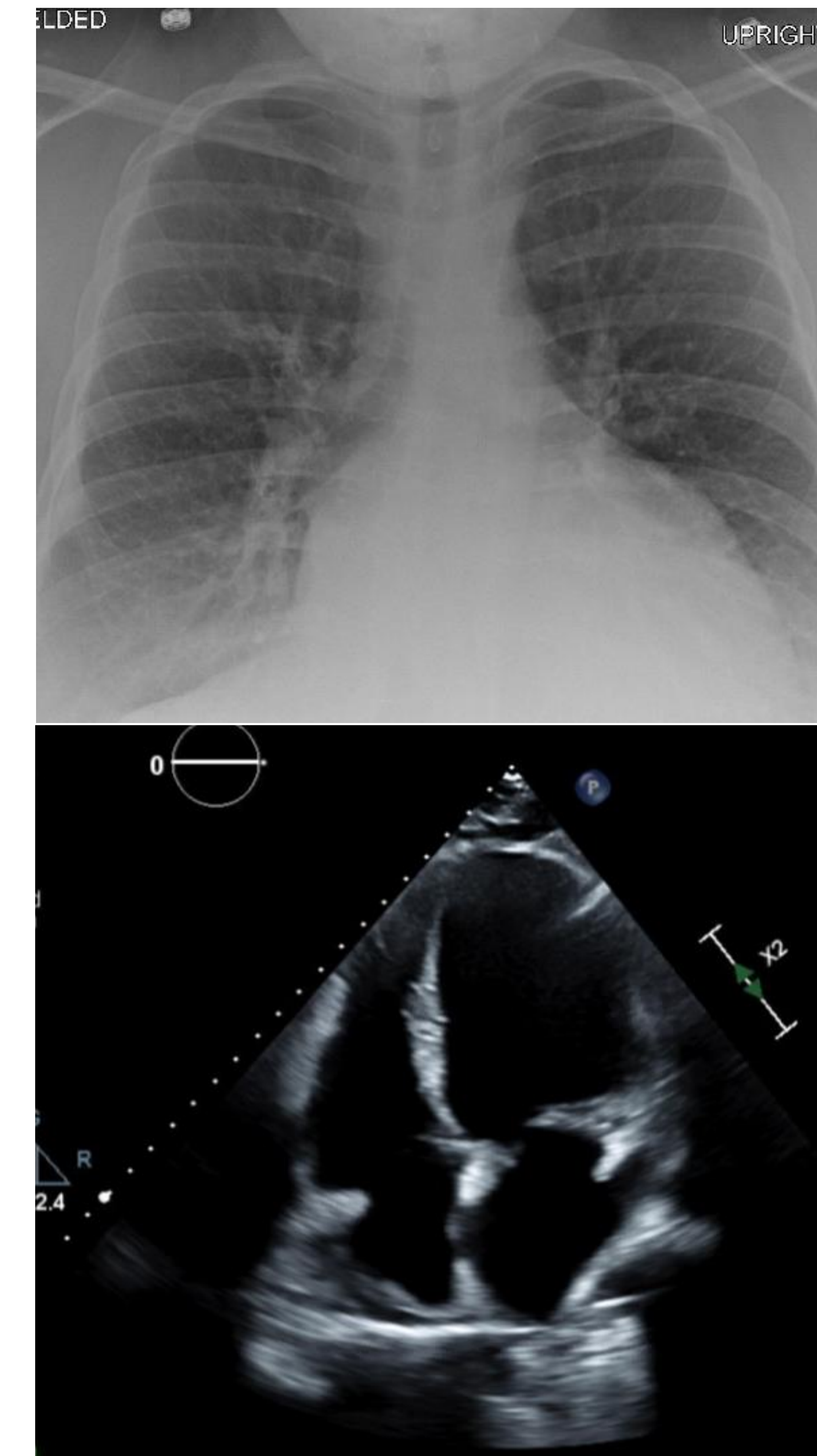
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Case Report

- 30 year-old female G2P1
- 30 weeks and 6 days with history of ischemic cardiomyopathy with reduced ejection fraction (30%, NYHA class 2) status post multiple Drug eluting stents on aspirin and clopidogrel (most recent 10months prior), Morbid Obesity
- Presented with acute decompensated heart failure with superimposed pre-eclampsia
- Significant findings on Pre-Op Exam
 - Favorable Airway, 1+ pitting edema, bilateral rhonchus breath sounds, elevated LFTs,
 - Left Ventricular Ejection fraction 25%, Right Ventricular function within normal limits
- Pre-Op interventions
 - Diuretics, Prenatal steroids, appropriate NPO status
- Pre-induction Access
 - Arterial Line, IJ multiple access catheter, Groin sheaths for rapid initiation of ECMO if needed
- Controlled Induction
 - Remifentanyl, lidocaine, low-dose epinephrine infusion, propofol, esmolol, succinylcholine
- Maintenance: 1% Sevoflurane and 50% Nitrous oxide
- Intra-op: TEE placed, hysterectomy and salpingectomy performed, oxytocin (infusion and boluses) and carboprost given
- Extubated in OR and taken to ICU



Discussion

- General Anesthesia vs. Neuraxial
 - High risk for further episodes of decompensated heart failure
 - Current clopidogrel use
 - Favorable Airway
- Rapid sequence vs. Controlled Induction
 - Higher and more severe risk for cardiovascular compromise compared to aspiration risk
- Remifentanyl
 - Minimize post birth respiratory depression
 - Anxiolysis during line placement
 - Facilitate tight hemodynamic control
 - Decrease need for other hypnotic drugs

- References

- 1.Frassanito L, Vagnoni S, Zanfini BA, Catarci S, Maggiore S, Draisci G. General anesthesia for caesarean delivery in a pregnant woman affected by acute myocardial infarction. Eur Rev Med Pharmacol Sci. 2012 Aug;16(8):1123-6. PMID: 22913165.
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