

A Case of Paradoxical Vocal Fold Motion in Pregnancy

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Background:

Paradoxical vocal fold motion disorder (PVFM) is a rare but well described process. It can often be misdiagnosed as an asthma exacerbation, leading to excessive hospitalization, medical utilization and tracheal intubation (1).

PVFM has been shown to respond to botulinum toxin, voice therapy and treatment of underlying laryngopharyngeal reflux (2).

This case describes management of PVFM in the peripartum period. It displays the crucial role of the obstetric anesthesia team.

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Respiratory Distress

33w3d

ENT consulted

- Recurrent vocal cord spasm/stridor
- Racemic epi, nebulized lidocaine, midazolam, BiPAP temporarily improved symptoms

Readmission to ICU

35w1d

Frequent Stridor

- Restarted prior treatments and placed on BiPAP
- Began delivery planning for 36wks

Postpartum

Postoperative Course

- Extubate POD1
- No additional episodes of vocal cord spasm/stridor
- D/C POD4
- Resumed botulinum injections out pt

23 yo G1P0

PMHx

- A2GDM, gHTN, asthma, ADHD, depression and PVFM
- Frequent episodes of PVFM requiring multiple intubations & ICU
- Gained control with botulinum toxin injections
- Discontinued once pregnant

- ENT recommended against intubation unless decompensation
- Taken to OR for B/L vocal cord botulinum injections under sedation
- D/C hospital day 4

33w4d

Vocal Cord Injection

- Acute spasm → maternal hypoxia
- OB and Anes teams called to bedside
- Fetal bradycardia noted
- Emergent intubation and CD performed in ICU
- Concern for possible placental abruption

35w3d

Emergent CD in ICU

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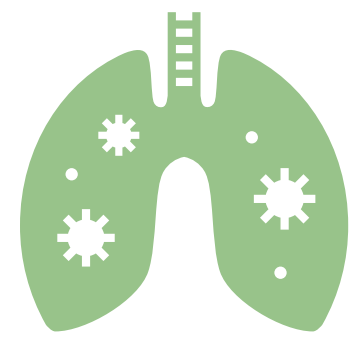
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Discussion:



PVFM Considerations

Botulism injections

Anxiolysis

GERD treatment

BiPAP



Pregnancy Complications

Airway edema

Increased minute
ventilation

Increased reflux



NORA Cesarean Delivery

Ventilator differences

Airway materials

Cardiac interventions maybe
needed



Standardizing Response

Creation of stat
NORA delivery cart

Improved access to
uterotonics



References