Syrinx and Symptomatic Covid-19 in Pregnancy

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Introduction

- Syringomyelia
  - A rare spinal cord pathology results in damage to the tissue
  - Syrinx: fluid-filled cyst within the spinal cord
  - Causes
    - Congenital
    - Traumatic
  - Currently no consensus for management

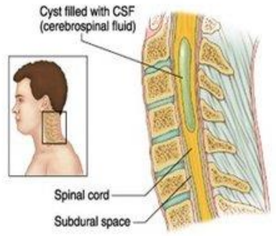
Case Presentation

- 31yo F G3P0111 at 34w2d with history of scoliosis, traumatic MVC complicated by temporary paraplegia, syringomyelia with sensory deficits below T8-9 status post spinal fusion. History of 1 prior Cesarean delivery

- Presented with headaches and severe range blood pressures, diagnosed with pre-eclampsia with severe features
- Exam findings: shortness of breath, fatigue, congestion, frequent cough -- found to be COVID-19 positive

Imaging (MRI from 9 months prior)
- Syringomyelia with 2 discrete syrinx:
  1. C7 to T1
  2. T 2-3 to the filum terminale

Syrinx



Case Presentation: Imaging

Delivery Course

Decision Making
- Neurosurgery consult on admission
- Multidisciplinary team discussion
  - No time for additional imaging given urgency of delivery due to pre-eclampsia
- Uncomplicated CS under GA, extubated in OR
- Post op course uneventful, discharged home

Discussion

- Neuraxial anesthesia with syrinx can be risky
  - Changes seen in CSF flow dynamics
  - May cause additional syrinx
  - Devastating neurological consequences such as herniation
- Research has been limited to case studies
  - Most undergo GA
  - Recent imaging imperative
- COVID-19 in pregnancy
  - Advantages of neuraxial anesthesia
    - Provides excellent postoperative analgesia
    - Allows for early maternal/infant bonding
    - Maintains spontaneous ventilation, protected airway
      - Known difficult airway in pregnancy
      - Increased aspiration risk
  - Concerns with airway manipulation in COVID-19
    - Increased risk of viral transmission
    - Positive Pressure ventilation in COVID-19 patients

References

1. A+A. Sept 2017, 125. 3
2. Anesth: 2020, 132. 6