

Peri-partum management of subglottic stenosis in pregnancy in the morbidly obese patient with mental health problems: planning ahead

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Introduction

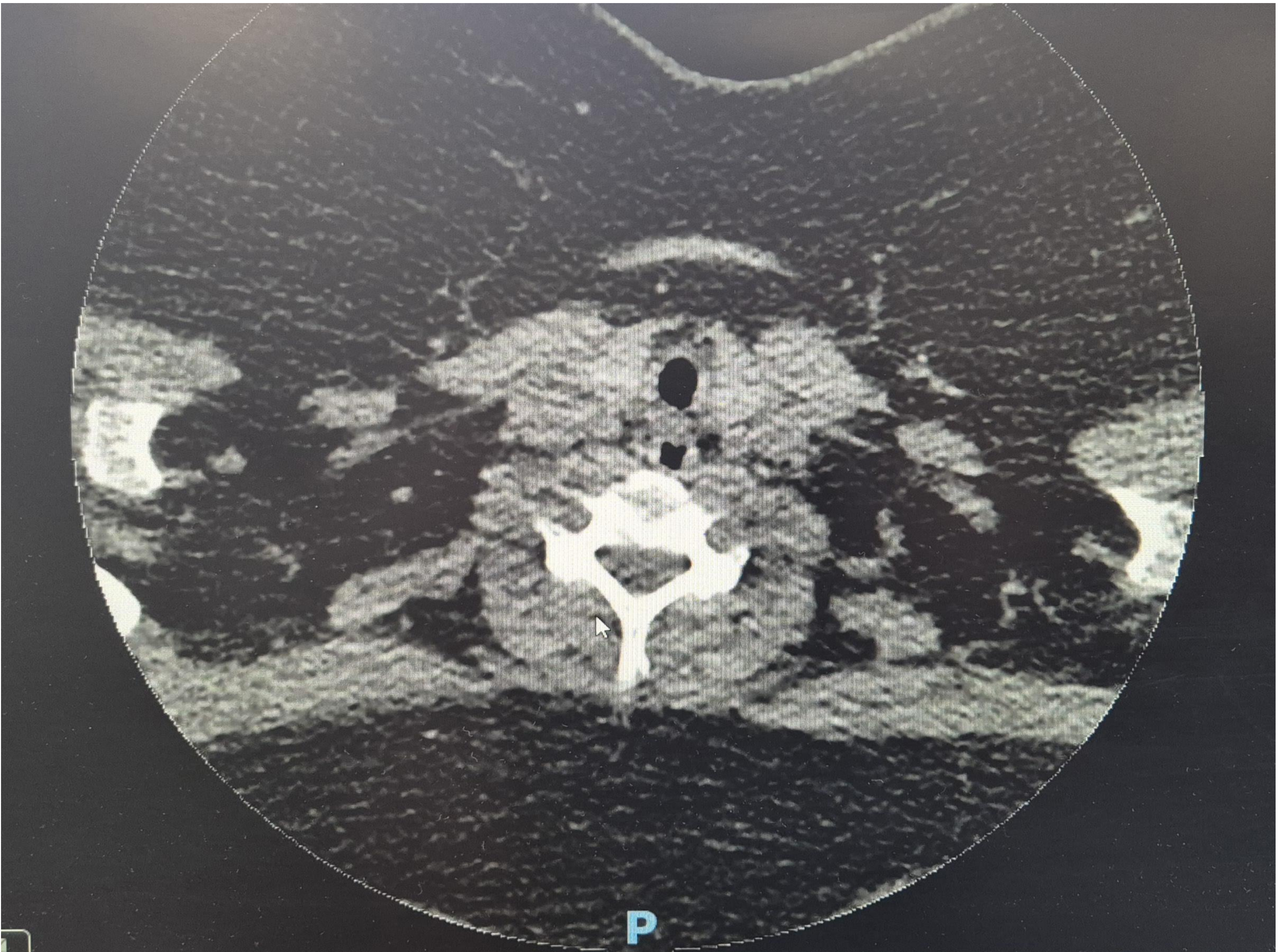
Subglottic tracheal stenosis introduces additional challenges to patient care for the multi-disciplinary team. It is a rare disorder with risk of life-threatening airway compromise⁽¹⁾. Severe cases often require surgical intervention in the peripartum period⁽²⁾. We present a case of peripartum management of a patient with idiopathic tracheal stenosis

Case Report

- 27-year-old, known subglottic stenosis requiring repeat balloon dilatation every 6 months
- Morbid Obesity BMI 50.5, reflux,
- Anxiety, PTSD, Borderline personality disorder
- Referred to anaesthetic assessment clinic at 13 weeks of pregnancy with worsening symptoms at 16 weeks followed by tracheal dilatation
- Tracheal dilatation at 32 weeks of pregnancy
- Required obstetrics, anaesthetics, midwifery, thoracic surgery, perinatal mental health team delivering care across 3 sites
- Deemed safe for delivery at DGH by thoracic surgery after dilatation at 32 weeks
- Patient wished for vaginal delivery despite obstetrician recommending elective LSCS
- Anaesthetic plan for early epidural and prompt availability of senior help with anticipated difficult airway and ventilation at DGH
- Short labour for primigravida delivered with episiotomy, time not allowing for epidural

Discussion

- ✓ Rare disease presentation
- ✓ Idiopathic
- ✓ More frequent requirement for balloon dilatation in pregnancy
- ✓ Involvement of multiple teams
- ✓ Care delivery across multiple sites
- ✓ Continuity of care
- ✓ Decision-making about the location of delivery
- ✓ Reviewing the trend of efficacy of tracheal dilatation
- ✓ Balancing safety with patient wishes and patient counselling
- ✓ Supporting the patient’s mental health
- ✓ Peri-partum anaesthetic plan – prioritising early regional analgesia/ anaesthesia
- ✓ Preparation for sub-glottic difficult airway compounded by obesity – known easy glottic visualisation
- ✓ Plan for recruiting additional support if assistance is required in an emergency



Follow up

- ❖ Post-natal follow-up 2 weeks after delivery
- ❖ Remained well. No respiratory or mental health concerns

References

1.A. Scholz, K. Srinivas, M. R. W. Stacey, P. Clyburn. Subglottic stenosis in pregnancy. *British Journal of Anaesthesia*.2008; 100: 385-8.
2.Miller, K.M., Liang, K.Y., Nero, N., et al. Surgical Management of Airway Stenosis During Pregnancy: A Scoping Review. *The Laryngoscope*. 2024 <https://doi.org/10.1002/lary.30994>