



# Multiple primary spontaneous pneumothoraces in pregnancy: Can a successful vaginal delivery be achieved with minimal medical intervention?

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#### Background

Primary spontaneous pneumothorax (PSP) in pregnancy while rare can be fatal. Current literature recommends epidural analgesia, and instrumental delivery during the second stage of labour to minimise prolonged Valsalva.

#### Aims

To present a unique case of a pregnant woman with PSP requesting minimal medical intervention during delivery and the need for a clear management plan in the event of deterioration.

#### Case/Results

We present a 24-year-old Caucasian woman who experienced spontaneous pneumothoraces at 16 and 25 weeks in her first pregnancy requiring an intercostal chest drain and needle aspiration respectively. Her second pregnancy was not complicated by PSP, despite not undergoing video-assisted thoracoscopic surgery or pleurodesis. Notably, the patient wanted minimal medical intervention during labour and delivery, opting for a water birth and declining an epidural for both pregnancies. There were no peri- or post-partum complications in either pregnancy for mother and foetus.



Figure 1: CXR demonstrating left pneumothorax and left lung collapse © Department of Radiology Gold Coast Hospital

### Discussion

Given the patient's preference for a spontaneous vaginal delivery with minimal intervention, a peripartum management plan multidisciplinary involvement, required including anaesthetics, respiratory, intensive care, and obstetric teams. Prompt escalation to a Medical Emergency Team call, providing supplemental oxygen, urgent mobile chest Xray and potential chest drain, and contacting the aforementioned teams was discussed should she deteriorate. Should an emergency caesarean section be needed. spinal anaesthesia was preferred.

#### Conclusion

This case demonstrates pregnant women experiencing PSP can have a successful pregnancy outcome with minimal medical intervention when a clear management plan exists. We recommend increased vigilance for deterioration during labour and delivery, with early multidisciplinary involvement to management.



Figure 2: CXR post left intercostal drain insertion © Department of Radiology Gold Coast Hospital

