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Fetal intervention in high-risk type II CPAM: Reducing hydrops risk with thoracoamniotic shunt and laser ablation

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Introduction

Congenital lung malformations, particularly CPAM, are among the most frequent fetal anomalies. Types I and II can cause mediastinal shift, pulmonary compromise, and hydrops, requiring early prenatal diagnosis and intervention.

Intervention

A thoracoamniotic shunt was performed under local anesthesia using a 10F cannula and fetoscopic guidance. A Harrison catheter kit with a 4-mm tungsten guidewire was correctly positioned and verified. Subsequently, through a Chiba 18G needle, a 400-µm laser fiber was advanced 2 mm beyond the tip for targeted pulmonary tissue ablation.

Conclusion

Prenatal ultrasound and timely fetal intervention significantly improve prognosis in high-risk CPAM. Coordinated multidisciplinary care ensures optimal perinatal outcomes.

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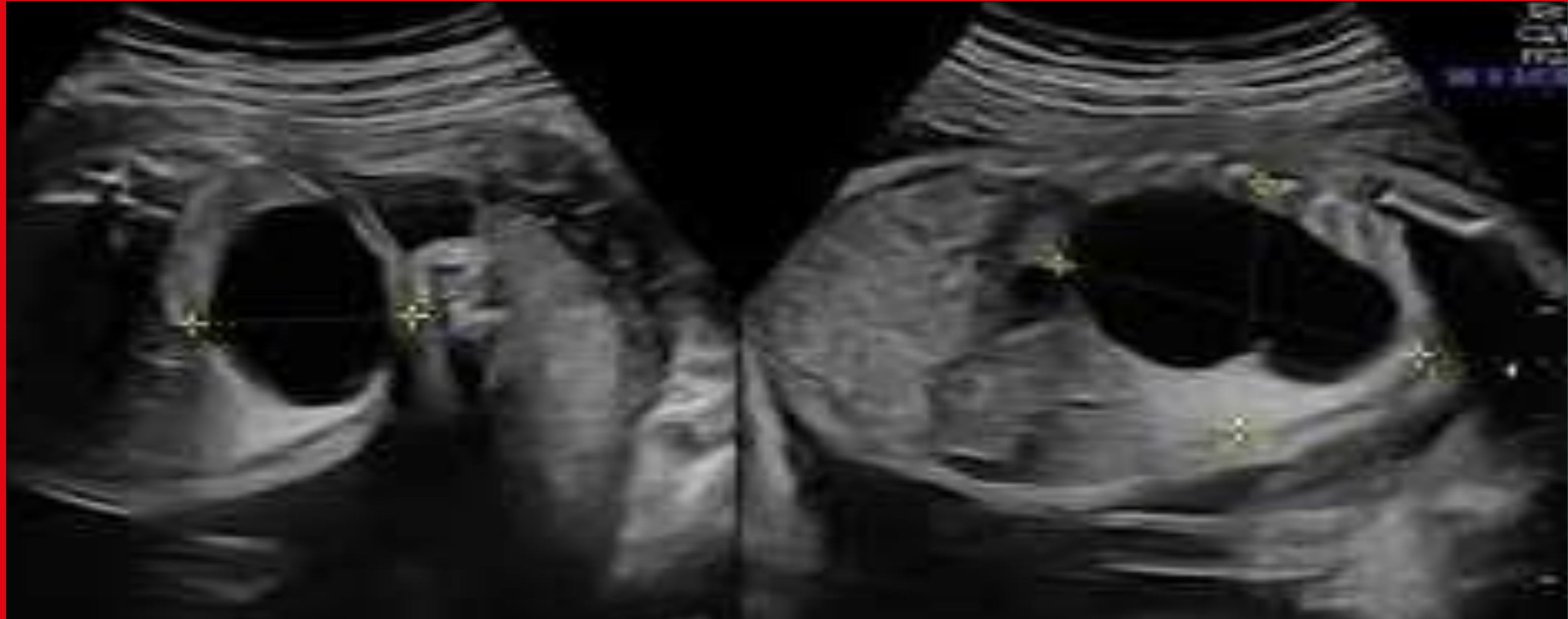
Case description

At 25.5 weeks, a 34-year-old patient was diagnosed with a large left-sided Type II CPAM causing mediastinal shift (CVR 1.8). Fetal therapy included thoracoamniotic shunt and laser ablation, reducing CVR to 0.25. At 38 weeks, delivery was performed using the SAFE technique. Neonatal outcome was favorable with multidisciplinary follow-up.

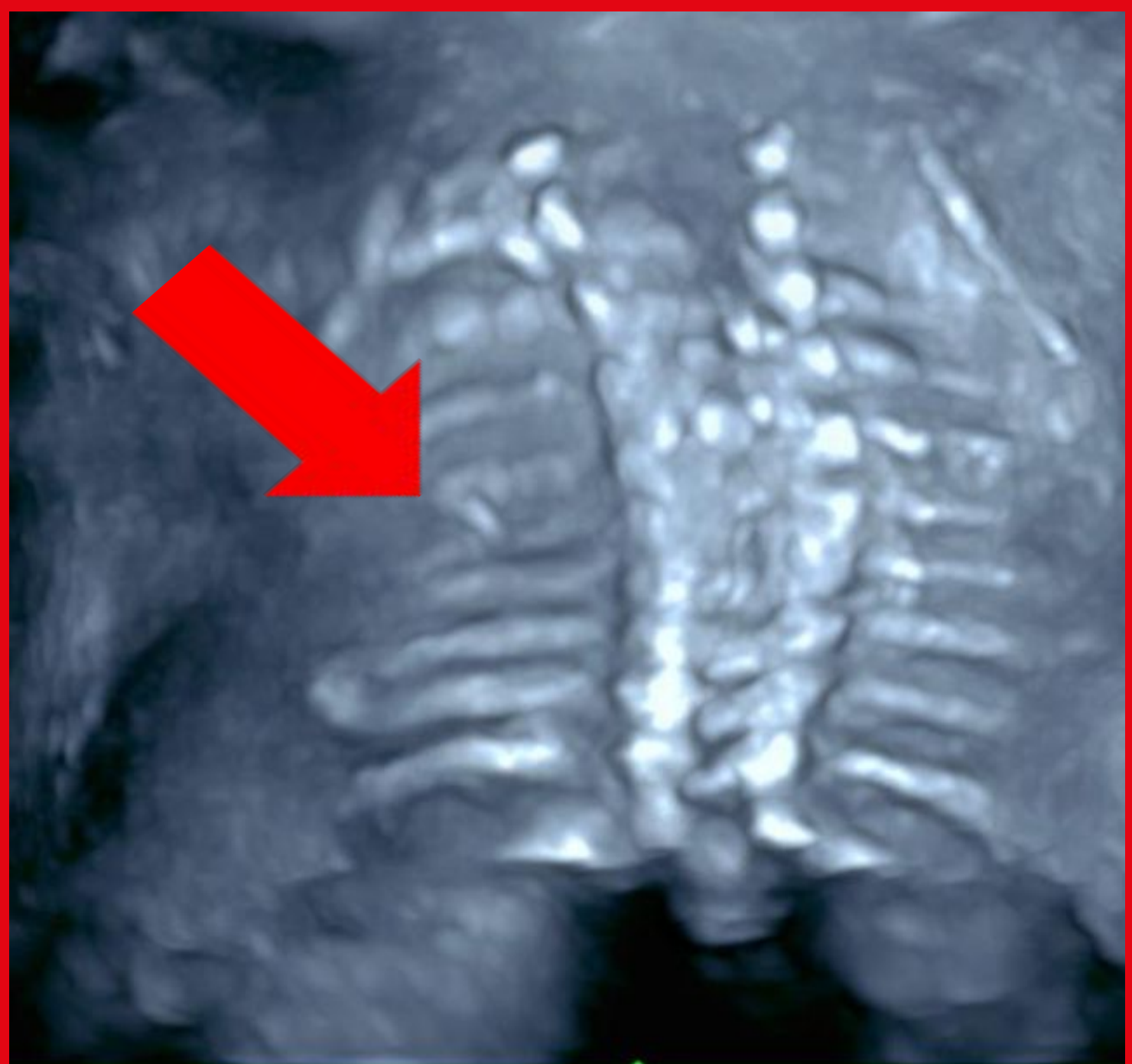
Post-procedure lesion regression



Lesion before intervention



Catheter successfully inserted



SAFE technique

