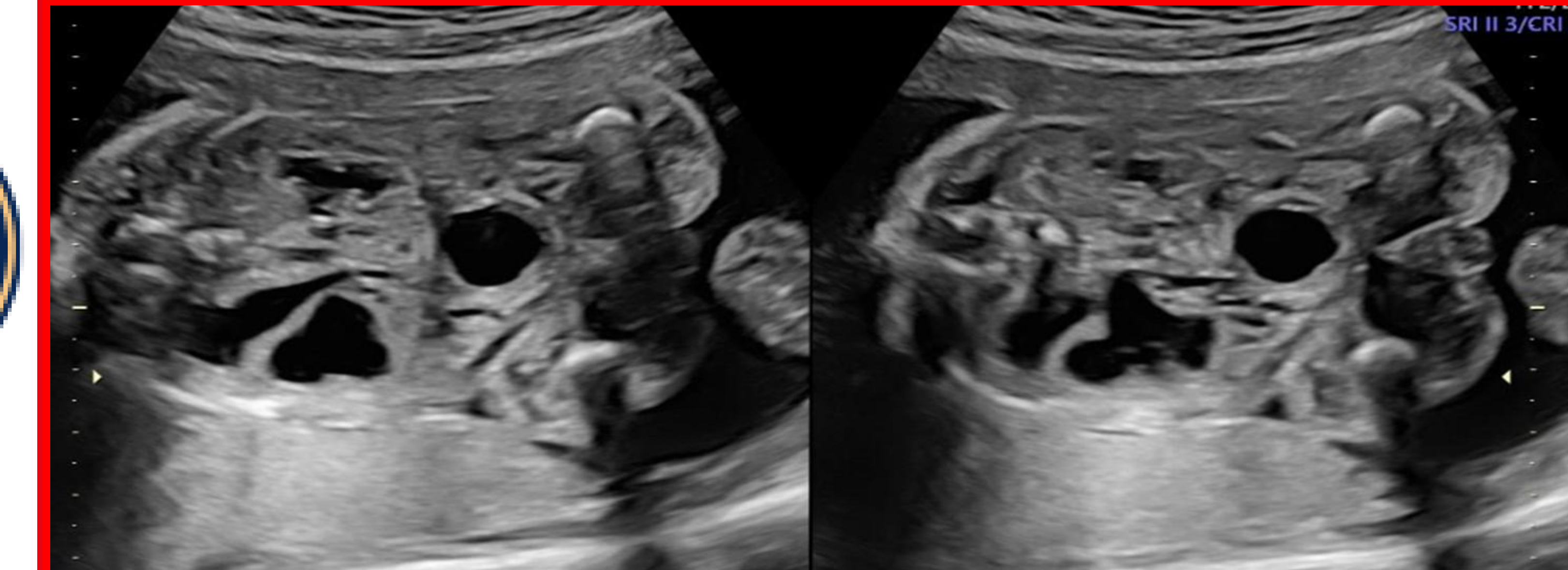


EP10.04 Fetal laser ablation for ureterocele: preventing renal damage in obstructive uropathy with associated oligohydramnios

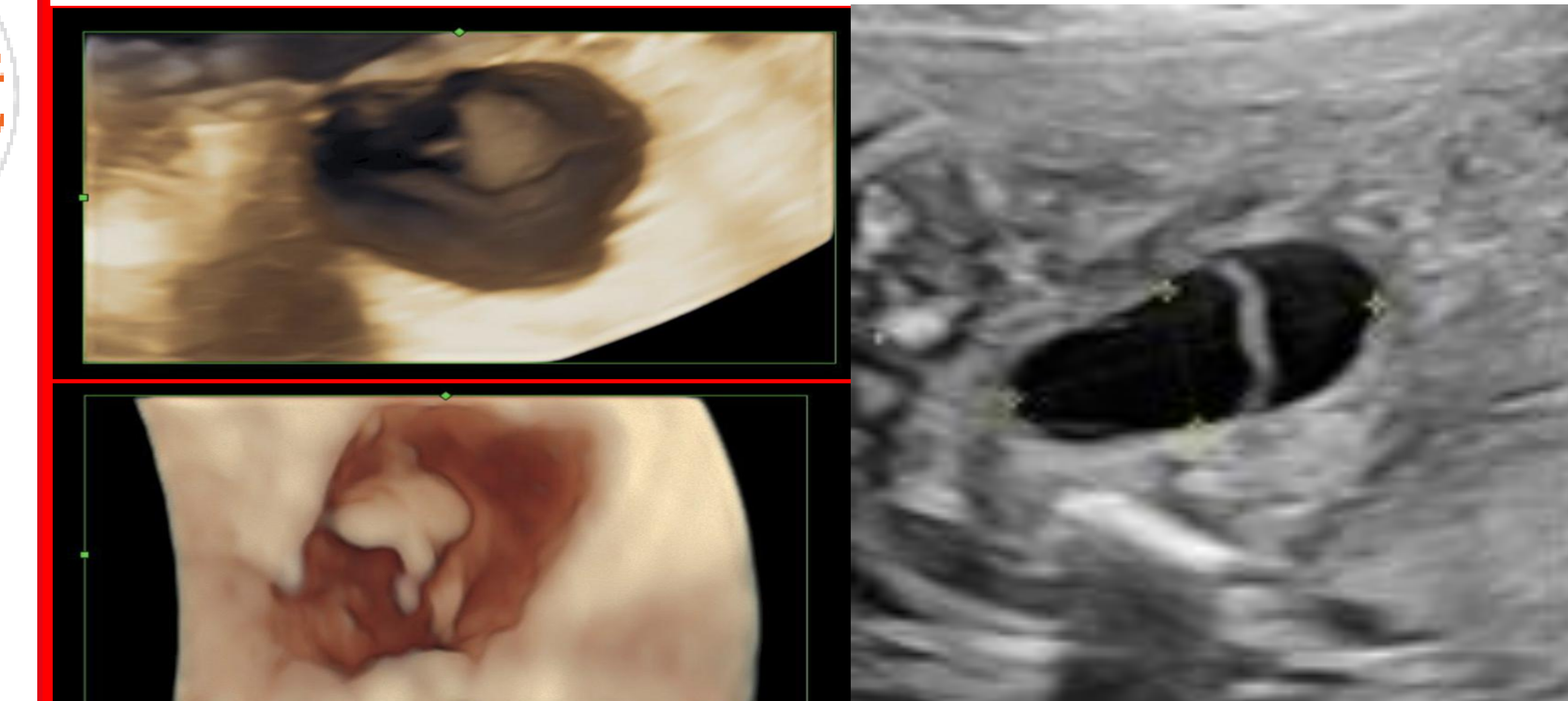
Molina-Giraldo S^{1,2,3,4} Rodríguez-Zuñiga T¹, Cantor-Guarnizo J^{1,3}, Pinto-Quñonez M^{1,2}



FUCS



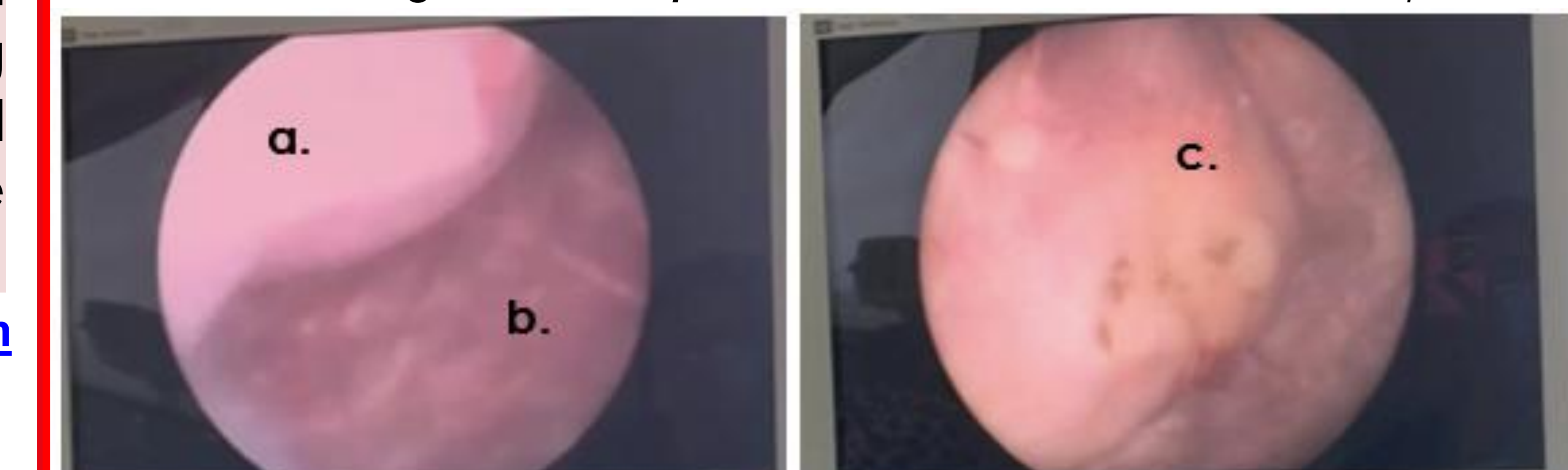
Upper urinary tract dilatation



3D reconstruction of ureterocele



Ultrasound guide for the procedure: ♦♦ reterocele ** Fetoscope



A. Ureterocele B. Bladder C. Ureterocele fenestrated mucosa after procedure

1. Section of Fetal Therapy and Fetal Surgery Unit, Division of Maternal – Fetal Medicine, Department of Obstetrics and Gynecology, Hospital de San José, Fundación Universitaria de Ciencias de la Salud–FUCS, Bogotá, Colombia
2. Section of Fetal Therapy and Fetal Surgery Unit, Division of Maternal – Fetal Medicine, Department of Obstetrics and Gynecology, Clínica Colsubsidio Castellana, Bogotá, Colombia
3. Research Division, Fundación Universitaria de Ciencias de la Salud–FUCS, Bogotá, Colombia
4. Fetal therapy and Surgery Research Network - FetoNetwork Colombia

Introduction

Fetal intervention is increasingly recognized as a key strategy in managing progressive obstructive uropathy, particularly when associated with oligohydramnios, which indicates a significant risk of renal impairment and pulmonary hypoplasia. Among urinary tract anomalies, ureterocele-associated upper urinary tract dilation can lead to progressive obstruction, amniotic fluid reduction, and postnatal renal dysfunction, necessitating timely intervention.

Case presentation

We report the case of a 27-year-old nulliparous patient, first evaluated at 21 weeks + 1 day of gestation, in whom advanced prenatal ultrasound identified an obstructive ureterocele causing progressive upper urinary tract dilation. Sequential follow-up at 31 weeks + 2 days demonstrated worsening bilateral hydronephrosis and developing oligohydramnios.

Intervention

After ruling out premature rupture of membranes, the decision to perform fetal laser ablation of the ureterocele was made.

Post-procedure ultrasound confirmed effective decompression, restoration of amniotic fluid levels, and resolution of urinary tract dilation, avoiding the need for early postnatal intervention.

Postnatal outcomes

At 39 weeks of gestation, the patient was admitted to the emergency department in labor. A cesarean delivery was performed due to labor arrest, resulting in the birth of a newborn weighing 3.300 grams. Postnatal ultrasound documented an enlarged left kidney associated with a duplex collecting system abnormality.

Conclusions

This case underscores the therapeutic potential of prenatal laser ablation in the management of obstructive fetal uropathy complicated by oligohydramnios, demonstrating that timely intervention can mitigate progressive renal impairment, restore amniotic fluid balance, and improve perinatal outcomes.

Correspondence: saulo.molina@urosario.edu.co ; tatianarz1993@gmail.com

References

1. Glassberg KI, Braren V, Duckett JW, et al. Suggested terminology for duplex systems, ectopic ureters and ureteroceles. J Urol 1984;132: 1153–4.
2. Society for Maternal-Fetal Medicine; Ghaffari N. Ectopic ureterocele. Am J Obstet Gynecol. 2021 Nov;225(5):B14-B15. doi: 10.1016/j.ajog.2021.06.041. Epub 2021 Sep 8.
3. Upadhyay J, Bolduc S, Braga L, et al. Impact of prenatal diagnosis on the morbidity associated with ureterocele management. J Urol 2002;167: 2560–5.