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### **Fetal lower urinary tract obstruction (LUTO)**

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Lower urinary tract obstructions (LUTO) have a stable prevalence of 3.34 per 10,000 total live births.(1) Associated structural or chromosomal anomalies are found in 22.2% of LUTO cases. The most common level of obstruction (63%) is at the proximal urethra (posterior urethral valve). Many LUTO cases may be diagnosed during routine scan in the first or second trimester. This allows for a possibility of determining individual fetal prognosis and treatments. Approximately 60% of posterior urethral valve cases are compatible with the criteria of isolated, non-female, singleton fetus that are amendable for fetal therapeutic intervention. Vesico-amniotic shunting has been the primary *in utero* treatment provided. Several systematic reviews suggest that shunting procedure can improve perinatal survival; however, the data are deduced from small, heterogeneous population of patients.(2) Displacement of the shunt remains common. The favorable prognostic parameters for postnatal renal function include amniotic fluid volume and the appearance of the renal cortex at diagnosis of LUTO.(3) Alternatively, percutaneous fetal cystoscopy is feasible using an antegrade technique with curved trocar and semi-rigid lens. Laser ablation of the posterior urethral valve under direct visualization provides drainage of the urine in a more physiological way. It may prevent deterioration of renal and lung functions. The low prevalence and relatively low rate of antenatal detection limit the number of cases amenable to prenatal surgical intervention. The future of fetal intervention in urology is contingent upon improved methods of studying the clinical outcomes of such treatments.

## **References**

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