Texas Children's Hospital®

Pavilion for Women

Fetal Lower Urinary Tract Obstruction (LUTO) Algorithm

Suspected fetal lower urinary tract obstruction (LUTO)

Referral and records received

FI anatomy US with bladder tap and genetic sampling, if indicated, by FI team

Assess renal function

If other anomalies suspected, anticipate MRI

Imaging and invasive Testing

If > 18 weeks at time of initial evaluation, schedule MRI

If < 18 wks, plan MRI when patient returns for f/u or after 18 weeks

Subspecialty consults

Genetic counseling

MFM/Fetal Intervention consult

Pediatric Nephrology

Pediatric Urology

Fetal ECHO & Cardiology

± Pediatric Surgery

± Neonatology

Multidisciplinary review

Normal AFI (>5th % for GA)

No fetal intervention

Weekly ultrasound follow up

Normal AFI (>5th % for GA)

Continue expectant management and weekly US f/u

Oligohydramnios (AFI < 5th for GA)/ anhydramnios

Oligohydramnios (AFI < 5th for GA)/ anhydramnios

Non-favorable renal function/genetic abnormality

Not a candidate for fetal intervention

Expectant mgmt consider palliative care if expecting a poor prognosis

Weekly ultrasound follow up

Plan delivery at term gestation

*Favorable fetal urine biochemistries. Adequate bladder refill after vesicocentesis and no chormosomal abnormalities

**Fetal Intervention

Weekly ultrasound follow up

Repeat fetal intervention if necessary

Plan delivery at term gestation

*Favorable fetal urine biochemistries:
NA+ < 100 mEq/L
Cl- < 90 mmil/L
CA++ < 8 mg/dl
Osmolarity < 200 mOsm/L
B2 microglobulin < 6 mg/L

**Standard of care: vesicoamniotic shunting. Anticipate at GA 16-28 weeks; if > 28 wks managed on case-by-case basis

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