

Recommendations for Postnatal Investigation of Antenatal Hydronephrosis

Dilation of the fetal renal pelvis (antenatal hydronephrosis) is frequently detected by antenatal ultrasound, occurring in 1 – 2% of pregnancies. Our objective was to develop an evidence-based algorithm for the postnatal investigation of infants with asymptomatic antenatally detected hydronephrosis in British Columbia. The goal of these recommendations is to ensure that all infants with clinically significant antenatal hydronephrosis receive timely and appropriate postnatal evaluation; with those at risk of progressive renal dysfunction secondary to urinary tract obstruction (i.e. Posterior Urethral Valve) evaluated on an urgent basis. It is intended as a guide to postnatal imaging for medical professionals counseling families of fetuses with antenatal hydronephrosis and/or caring for newborns and infants. For antenatal referral guidelines, please contact the Fetal Diagnostic Service or your regional Maternal Fetal Medicine providers.

The algorithm that follows is based on evidence and recommendations from current literature and on local practice and expertise in managing infants with antenatally detected hydronephrosis. It is the consensus of delegates from the Divisions of Maternal Fetal Medicine¹ and Medical Genetics² of BC Women's Hospital and the Divisions of General Pediatrics³, Pediatric Nephrology⁴, Pediatric Urology⁵ and Department of Radiology⁶ of BC Children's Hospital.

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References:

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