Monash Children's Hospital Referral Guidelines PAEDIATRIC UROLOGY

EXCLUSIONS

Services not offered by Monash Children's Hospital

- Monash Children's Hospital does not offer circumcision for cultural/religious reasons
- Children with incontinence or enuresis (bedwetting): Click here for Continence Clinic
- Patients beyond 16th birthday: <u>Click here</u> for adult Monash Health Urology guidelines

CONDITIONS

GENERAL UROLOGIC CONDITIONS

Ambiguous genitalia

Haematuria

Hydronephrosis

Hypospadias and chordee

Renal and ureteric calculi

Urinary Incontinence

Urinary Tract Infection

Voiding dysfunction

MALE SPECIFIC CONDITIONS

Balanitis

Foreskin concerns

Paraphimosis

Phimosis

Scrotal pathology - acute

Undescended / retractile testes

PRIORITY

All referrals received are triaged by Monash Children's Hospital clinicians to determine urgency of referral.

EMERGENCY

For emergency cases please do any of the following:

- send the patient to the Emergency department OR
- Contact the on call registrar OR
- Phone 000 to arrange immediate transfer to ED

URGENT

The patient has a condition that has the potential to deteriorate quickly with significant consequences for health and quality of life if not managed promptly.

ROUTINE

The patient's condition is unlikely to deteriorate quickly or have significant consequences for the person's health and quality of life if the specialist assessment is delayed beyond one month

Head of Unit:A/Prof Chris Kimber

Program Director:
Mr Alan Saunder

Last updated: 27/06/2019





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REFERRAL

How to refer to Monash Children's Hospital Find up-to-date information about how to send a referral to Monash Health on the eReferrals page on our website.

CONTACT US

Medical practitioners

To discuss complex & urgent referrals, call: Paediatric Urology Fellow 0466 005 884

For patients not eligible for Medicare cover, specialist urologic care can also be arranged. Please contact the Department of Paediatric Urology to discuss this: Phone: (03) 8572 3838

General enquiries

Phone: 8572 3004

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GENERAL UROLOGIC CONDITIONS

AMBIGUOUS GENITALIA

Initial GP Work Up

Clinical history

- · Family history of similar conditions
- · Concerns at birth

Investigations

Nil

Management Options for GP

N/A

WHEN TO REFER?

Routine

Concern about significantly abnormal genitalia

BACK

HAEMATURIA

Initial GP Work Up

Clinical history

- Microscopic haematuria
 - Greater than 25 RBC/μl in urine microscopy
- · Macroscopic haematuria
 - Visible blood in urine
 - Urinalysis positive for blood

Investigations

- Check blood pressure and growth
- · Urine tests:
 - Urinalysis with micro
 - Urine culture, protein, creatinine ratio, calcium to urine creatinine ratio
- Serum tests:
 - o Creatinine, U&Es
 - o FBC
 - For macroscopic haematuria test coagulation studies: APTT, INR
- Urinary tract ultrasound

Management Options for GP

- Perform at least two consecutive urine dipsticks or urinalysis 1-2 days apart
- Refer to <u>nephrology and continence</u> for:
 - o Microscopic haematuria
 - o Family history of renal failure
 - Microscopic haematuria in multiple family members
 - Associated symptoms
 - Weight loss, fever, joint pain or rash
 - Poor growth
 - o Elevated blood pressure
 - o Oedema
 - o Elevated serum creatinine/ potassium
 - Red blood cell casts
 - o Abnormal renal ultrasound

WHEN TO REFER?

Emergency

Inability to pass urine → immediate referral to Emergency Department

Urgent

- · Macroscopic haematuria with pain
- Recurrent episodic macroscopic haematuria



HYDRONEPHROSIS

Initial GP Work Up

Clinical history

- · Commonly unilateral
- Often identified on pre-natal scans
- May be associated with pathology or be clinically insignificant
- · Signs may include:
 - o Abdominal, back or flank pain
 - Nausea and vomiting
 - Painful urination
 - Recurrent UTI
 - Fever
 - o Cloudy urine

Management Options for GP

Investigations

- Urine microscopy and culture if unwell
- Urinary tract ultrasound ensure images are available for review at triage

See relevant fact sheet and guidelines for further information:

- antenatal hydronephrosis information sheet
- hydronephrosis information sheet

WHEN TO REFER?

Urgent

- · Severe hydronephrosis (SFU grade 4)
- Bilateral hydronephrosis (SFU grade 3+)
- Hydronephrosis with associated concerns
 - Single kidney
 - o Duplex system
 - Ureteric dilatation
 - Ureterocoele
- Hydronephrosis <u>and</u> pain or urinary tract infection

Routine

Hydronephrosis without symptoms or associated concerning features above

BACK

HYPOSPADIAS AND CHORDEE

Initial GP Work Up

Clinical history

- Chordee significant downward curvature and angulation of the penis associated with erection
- Asymmetry of the foreskin with a normal urethral meatus
- Hypospadias birth defect in boys where the urethral opening is not located in the normal position this can be anywhere on the under surface of the penis extending down behind the scrotal sac
- Incomplete foreskin forming a hood
- Deflected urinary stream

Management Options for GP

Refer to urology department for surgical assessment

WHEN TO REFER?

Routine

At 3 months of age



RENAL AND URETERIC CALCULI

Initial GP Work Up

Clinical history

- · May be asymptomatic in children
- Cramping, intermittent abdominal and flank pain with haematuria, nausea or vomiting
 - Risk factors for stones
 - o Past or family history of stones
 - o Poor fluid intake
 - o Ketogenic diet
 - o Cystic fibrosis
 - Urinary tract abnormalities
 - Some medications
 - o Some inherited disorders

Investigations

- Urinary tract ultrasound
- Urine dipstick for blood
- Urine microscopy and culture

Management Options for GP

- If the stone is small, the child well and pain is manageable, treat at home. Stones smaller than 5mm often pass on their own.
- · Use non-steroidal analgesia
- Advise increase fluid intake
- Advise family to strain urine for a few days until stone passes and save it in a clean container to enable analysis to guide future treatment
- After passing stone arrange urinary tract ultrasound and referral to Urology clinic

WHEN TO REFER?

Emergency

- · Severe and uncontrolled pain
- · Inability to pass urine
- · Immediate referral to emergency department

Urgent

Known presence of asymptomatic stones



URINARY INCONTINENCE

Initial GP Work Up

Clinical history

- Consider the following when performing a clinical history and examination:
 - Daytime accidents
 - Frequency
 - Urgency
 - o Straining
 - o Pain on urination
 - If periods of dryness ask about physical, emotional and social triggers
 - o Previous treatments
 - History of constipation
- Consider medical problems that may contribute to bedwetting (diabetes, UTI, faecal soiling, pin worms, renal failure, seizures, sleep problems etc.)

Investigations

- Bladder diary (input and output frequency)
- Investigate daytime symptoms before addressing night time enuresis
- Urinalysis only if symptoms suggestive of diabetes, UTI or constipation

Management Options for GP

Nocturnal enuresis

- Reassurance
- · Manage constipation
- Education and reassurance consider the following options:
 - Motivational therapy
 - o Enuresis alarms
 - Self-awakening
 - Medications Desmopressin

WHEN TO REFER?

Urgent

Refer to Urology

- · Abnormal urinary tract ultrasound
 - Hydronephrosis
- · Associated genital anomaly

Routine

Refer the following to Nephrology Continence Clinic

- Night wetting persistent following failed treatment in child over 7 years of age
- Day wetting persistent after constipation / UTI treated in child over 5 years of age



URINARY TRACT INFECTION

Initial GP Work Up

Clinical history and physical examination

- · Dysuria, frequency, haematuria
- Malodorous urine
- Abdominal pain
- Fever
- General malaise
- · Failure to thrive

Investigations

- MSU for microscopy and culture
- Consider renal and bladder ultrasound to rule out anatomical anomalies

Management Options for GP

- Treat acute infection and re-test after completion of treatment to ensure cure
- Education about bladder emptying, hydration and perineal hygiene
- · See relevant information sheets:
 - o Urinary tract infection child
 - o Urinary tract infection infant

WHEN TO REFER?

Emergency

Infants <6 months of age with signs of sepsis → refer to emergency department

Urgent

Refer to Urology if:

 Ultrasound shows anatomical anomaly such as hydronephrosis

Refer to Nephrology if:

- · Associated elevated blood pressure
- · Infant with febrile UTI
- · Child with 2 or more febrile UTIs

Routine

Refer to General Paediatrics if:

- Infant with confirmed UTI without fever
- · Child with 3 or more UTIs without fever



VOIDING DYSFUNCTION

Initial GP Work Up

Clinical history

Underactive bladder/retention

- Recurrent UTI
- Painful urination
- · Bloating or pain in the lower abdomen

Overactive bladder

- · Incontinence, frequent or urgent urination
- Bladder spasm

Obstruction

- · Fever, nausea and vomiting
- Pain in lower abdomen
- Urinary hesitancy, dribbling, slow stream
- Incomplete emptying, intermittent or decreased urine flow
- Blood in the urine
- May have a neurological condition, spinal injury or had recent surgery

Investigations

- · Exclude constipation
- · Urinalysis +/- culture
- · Bladder diary
- Urinary tract ultrasound with pre and post void bladder volume assessment

Management Options for GP

- · Treat constipation
- Advise regular toileting and good fluid intake
- Refer to <u>abnormal bladder function</u> information sheet for initial management options

WHEN TO REFER?

Emergency

Unable to pass urine - immediate referral to emergency department

Urgent

- History of neurological condition or spinal injury
- Significant pain

Routine

Refer to Nephrology Continence Clinic with

- · Voiding dysfunction with associated UTIs
- · Overactive bladder
- Incontinence



MALE SPECIFIC CONDITIONS

BALANITIS

Initial GP Work Up

Clinical history and physical examination

- May cause dysuria and penile discharge
- Foreskin may become red and swollen

Management Options for GP

- · Salt bathing can help early on
- · Topical antibiotics are not indicated
- Consider oral antibiotics if erythema extends down penile shaft
- See <u>foreskin concerns</u> information sheet

WHEN TO REFER?

Routine

- · Recurrent balanitis
- · Preputial ballooning on voiding

BACK

FORESKIN ADHESIONS / SMEGMA CYSTS

Initial GP Work Up

Clinical history and physical examination

- · Most foreskins are not retractable at birth
- Foreskins <u>do not</u> need to be retracted for cleaning before puberty
- Foreskin adhesions to glans and accumulation of smegma under the foreskin is common and normal

Management Options for GP

- · Reassurance for family
- Encourage <u>child</u> to retract foreskin for cleaning when this becomes easy

WHEN TO REFER?

Referral is NOT required as active management is unnecessary



MALE SPECIFIC CONDITIONS (cont'd)

PARAPHIMOSIS

Initial GP Work Up

Clinical history and physical examination

- Commonly results from a previous normal foreskin that has been retracted and not been replaced
- Oedema traps foreskin behind glans

Management Options for GP

- Compression for 5 minutes
- · Try to reduce and advise future prevention
- Keep fasted and refer to Emergency Department if unable to replace

WHEN TO REFER?

Emergency

If unable to replace foreskin, refer to emergency department

BACK

PHIMOSIS

Initial GP Work Up

Clinical history and physical examination

- Most foreskin openings are 'tight' in childhood
- Foreskin retractability is highly variable and not necessary to achieve before puberty
- Pathological phimosis = scarred foreskin opening
- Ballooning on voiding

Management Options for GP

 If ballooning on voiding +/-or balanitis, consider topical steroid creams e.g.Betnovate 1/5 for 6 weeks

WHEN TO REFER?

Urgent

Pin hole preputial orifice with poor urinary stream

Routine

- · Pathological phimosis
- Persistent symptoms and failed conservative treatment with creams



MALE SPECIFIC CONDITIONS (cont'd)

SCROTAL PATHOLOGY

Initial GP Work Up

Clinical history

- · Age of the child
- Previous trauma
- Onset of pain
- Fever
- Consider sexual activity in adolescent
- Prior genito-urinary surgery / known anomaly

Physical examination

- Presence or absence of cremasteric reflex (this is usually absent in torsion of the testes)
- Observation of gait and resting positioning
- Transillumination
- Reducible swelling
- Palpate and compare the lower abdomen and inguinal area
- Palpate and compare the scrotum and testes

Investigations

- Urinalysis MSU and MCS
- · Blood tests are not used in the acute setting
- · Ultrasound only if non-acute

Management Options for GP

- Acute scrotal pain requires an immediate surgical assessment due to the risk of torsion of the testis and subsequent infarction
- If torsion is suspected, keep child fasted and refer to <u>nearest</u> hospital emergency department

WHEN TO REFER?

Emergency

Immediate referral to nearest hospital's emergency department for any of the following findings:

- · Acute uncontrolled pain
- Swelling with pain
- · Tender testis
- · Absence of cremasteric reflex

Urgent

- · Firm testicular mass
- · Suspected hernia

Routine

Suspected hydrocele



MALE SPECIFIC CONDITIONS (cont'd)

UNDESCENDED / RETRACTILE TESTES

WHEN TO REFER?

Initial GP Work Up

Clinical history and physical examination

 Diagnostic imaging has no role in the management of undescended testes

Retractile testes

- Testis normal in size that reach the bottom of the scrotum without tension
- Usually in scrotum after warm bath

<u>Undescended testes</u>

 Cannot be manipulated into the bottom of the scrotum after the age of 3 months

Management Options for GP

- · Reassure and re-examine if retractile
- · Refer if concerned

Routine

- Testis not fully descended by 3 months
- Retractile testes may require referral if they become undescended over time ("ascending testis")

