Management of Undescended Testicles

Introduction

Purpose

Testicles are considered undescended when they fail to spontaneously migrate down into the scrotum after birth. Boys with bilateral, non-palpable testes, associated or not with hypospadias, require immediate consult of appropriate specialists, including Endocrinology, Urology, Gynecology and/or Genetics for evaluation of a possible disorder of sex development.

Target Users

- Nurses, nurse practitioners, staff physicians, residents, fellows, and primary care physicians

Target Patient Population

- **Inclusion:** Intended for boys 2 months of age or older who present with one testicle that is not palpable within the scrotum.
- **Exclusion:** Not intended for use in boys with bilateral undescended testicles.

Definitions

- **Retractile testes:** hypermobile testes; are descended testes that easily move back and forth between the scrotum and the abdomen. Retractile testes are normal testes that have been pulled into a suprascrotal position by the cremasteric reflex. These testes can be brought into a dependent scrotal position and will remain there if the cremasteric reflex is overcome.

Referrals

- Primary care physicians should refer boys two months of age or older who do not have spontaneous testicular descent to a surgical specialist for evaluation. It is expected that the testicles should descend by 6 months of age.
- Scrotal ultrasounds should not be completed prior to referral. These studies rarely have any impact on decision making.
- Retractile testicles do not need to be referred for surgical treatment however primary care physicians should assess the position of the testes annually to monitor for secondary ascent.
Clinical Recommendations

Management of Unilateral Undescended Testicles

- Epic referral received and child meets clinic criteria for unilateral undescended testis (child must be ≥ 6 months of age).
- Clinically determine testicular presence and location (retractile, ectopic, palpable, or unpalpable).
- Is the testicle palpable? (groin vs. ectopic)
- Is the child between 6-18 months?
- YES: Complete examination under anesthesia
  - Surgery to occur between 6-18 months of age (inguinal/scrotal orchidopexy)
  - if child is high risk, book pre-anesthesia consult and admit as inpatient
  - otherwise same day surgery (1 stage orchidopexy)
  - discharge home from PACU
- NO: Child ≥ 18 months: surgery to occur within 12 weeks
  - if child is high risk, book pre-anesthesia consult and admit as an inpatient
  - otherwise same day surgery (1 stage orchidopexy)
  - discharge home from PACU

- Testicle found?
  - YES: Laparoscopic exploration
  - Testicle found?
  - YES: Remove atrophic testicle (orchiectomy)
    - 1 Stage orchidopexy
  - NO: 2 stage orchidopexy
    - stage 2 is completed at least 6 months after stage 1

- If retractile, refer back to primary care provider/community practitioner to complete annual exam to ensure position

Clinic Criteria
- Unpalpable testicle within scrotum
- No ultrasound required as per Choosing Wisely

For atrophic testicle:
- Primary care provider to refer at puberty for prosthetic testicle

©The Hospital for Sick Children (‘SickKids’). All Rights Reserved. This document may be reproduced or used strictly for non-commercial clinical purposes. However, by permitting such use, SickKids does not grant any broader license or waive any of its exclusive rights under copyright or otherwise at law; in particular, this document may not be used for publication without appropriate acknowledgement to SickKids. This Clinical Practice Guideline has been developed to guide the practice of clinicians at the Hospital for Sick Children. Use of this guideline in any setting must be subject to the clinical judgment of those responsible for providing care. SickKids does not accept responsibility for the application of this guideline outside SickKids.
Guideline Group and Reviewers

Guideline Group Membership:

1. Kristine Tomczyk, NP-Paediatrics, Urology
2. Dr. Fardod O’Kelly, Clinical Fellow, Urology

Internal Reviewers:

1. Dr. Darius Bagli, Staff MD, Division of Urology
2. Dr. Joana Dos Santos, Staff MD, Division of Urology

References


Attachments:

AAP orchidopexy.pdf
AUA guidelines orchidopexy.pdf
CUA-PUC guidelines.pdf
pathway_aug 9.pdf