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Institutional Use of Ultrasound in the Evaluation of Cryptorchidism

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Use of Ultrasound in the Evaluation of Cryptorchidism: A Single Institution Analysis

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Background

- The use of ultrasound or other imaging studies in the evaluation of patients with cryptorchidism is not recommended due to its very limited value.
- The American Urological Association guidelines recommend against the performance of ultrasound and other imaging modalities in the evaluation of patients with cryptorchidism prior to expert consultation.

Methods

- An institutional review board (IRB) approved retrospective review of ultrasound utilization in the evaluation of patients with cryptorchidism was performed from June 1, 2016, to June 30, 2019, at a single tertiary level pediatric hospital.

Results

- We identified 1796 patients evaluated in surgical clinics for cryptorchidism.
- Ultrasound was performed in 42% (n=754), most of which were ordered by referring physicians (91% n=686).
- Surgical intervention was performed in 75.2% (n=1351) of the entire cohort. Of those that received an ultrasound, surgical intervention was performed in 78% (n=588). Those 166 patients (22%) who did not undergo surgical intervention were referred with ultrasounds suggesting inguinal testes, however, all had normal physical examinations or mildly retractile testes at the time of consultation and were discharged from the outpatient clinic.
- **There were 597 patients referred without an ultrasound, 81% (n=483) were confirmed to have cryptorchidism at the time of specialist physical examination and underwent definitive surgical intervention, the remainder (19%, n=114) were discharged from the outpatient clinics.**

Conclusions & Guidelines

- Ultrasound evaluation of cryptorchidism continues despite high-quality evidence-based guidelines that recommend otherwise.
- Ultrasound does not influence the surgeon's decision to operate or the type of operation.
- **2014 American Urological Association (AUA) guidelines**
- recommend against all imaging studies in the evaluation of cryptorchidism - Grade B
- surgical consultation for all male newborns with bilateral, nonpalpable testes – Grade A
- surgical referral for all male infants who do not have testicular descent by 6 months of age – Grade B