The foreskin: Office management of the most controversial appendage

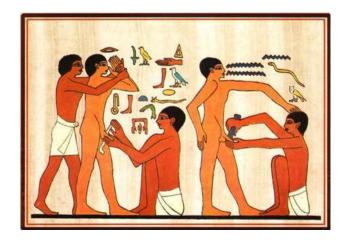
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Foreskin: a "bone" of contention!

Remondino (1846-1926): Prepuce an outlaw that required "summary surgical execution", because clothes made "the prepuce superfluous."

Talbot (1876-1925): Characteristics of the circumcised penis could be passed on to progeny, possibly describing hypospadias.



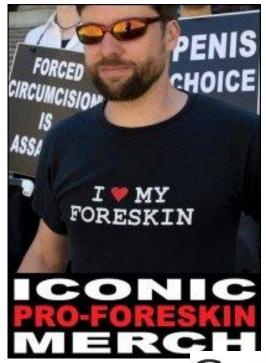


In: *Male and Female Circumcision*. Denniston GC, Hodges FM, Milos MF eds.

Kluwer Academic/Plenum Publishers, New York, 1999.



Anti circumcision crusaders







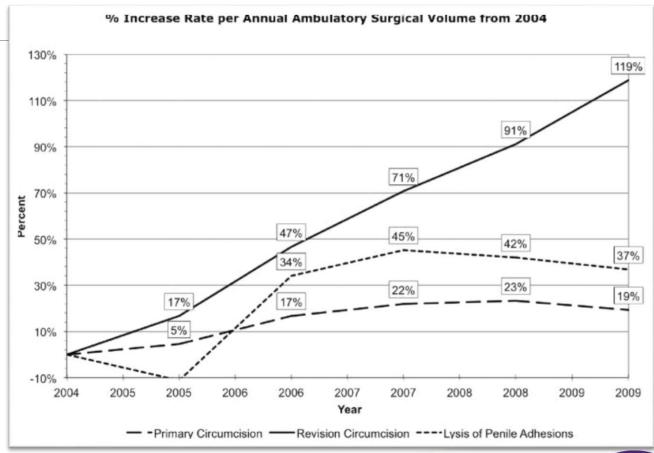




FS consults implications

- Average of 14 new FS consults per month
- About 50% referred from outside London
- Majority do not require any surgical intervention, simply reassurance
- Costs: 6.8 M USD over 6 years in 28 hospitals¹
- 1. Kokorowski et al, Clin Pediatr 2013







Consult 1: Phimosis

3 year old boy, tight foreskin, phimosis, balloons when he voids, dysuria, balanitis treated with polysporin x 3 times

- How do you differentiate physiological phimosis from true pathological phimosis?
- What is a significant episode of balanoposthitis?
- How do you manage this baby boy?





Physiologic phimosis

- Normal foreskin does not retract for the first few years of life- defined as physiological phimosis. No intervention or pediatric urology referral is required in this time period
- Ballooning of the foreskin is not an indication for referral <u>unless</u> there is a history of recurrent foreskin infections (balanoposthitis) or UTI's
- Allow normal retraction to proceed without intervention- this happens with reflex erections and smegma separating the foreskin from the glans
- Parental reassurance and regular examination of the foreskin is required during this period

Dave S, Afshar K, Braga L, Anderson P: CUA guidelines on care of the normal foreskin and neonatal circumcision in Canadian infants, 2018





Physiologic phimosis

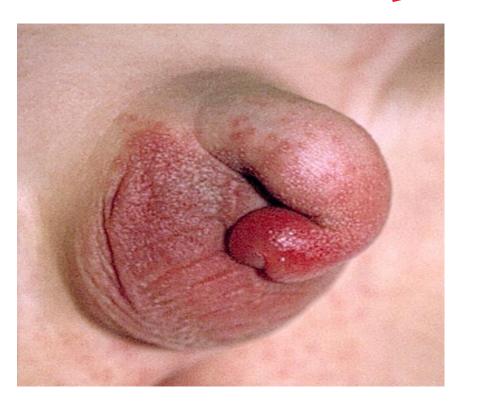
- In a older child (>5-6 years of age), topical steroids with gentle retraction is highly successful (75-90% success rate)
- Use a moderate to high potency topical steroid topical medication (betamethasone 0.5% or triamcinolone 0.1 %) BID with gentle retraction of the foreskin over a 6-8 week period, can be repeated if needed
- No side effects, success depends on compliance
- Circumcision is rarely indicated





Physiological phimosis

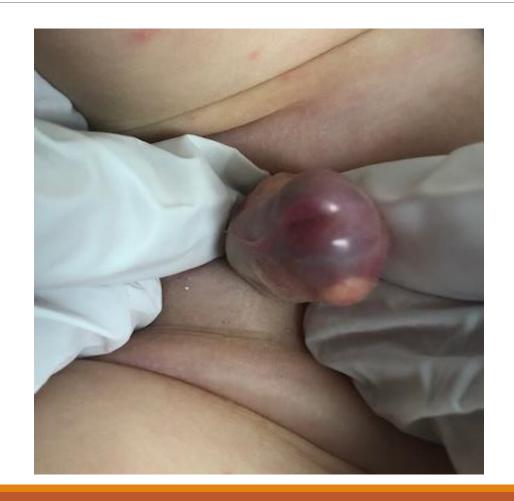
Pathological phimosis



Unnecessary and forcible FS retraction



Consult 2: Penile cyst







Consult 3: 9 yr old, previously retractable FS, obese











Recognizing Lichen sclerosus/BXO

- Linked to obesity (OR of obesity 5.1 in boys with BXO)¹
- Suspect with secondary phimosis²
- Likelihood to respond to topical steroids low (25% avoided circumcision)³
- Meatal involvement in up to 2%, calibrate meatus and follow up with uroflowmetry
- 1. Fuchs ME, et al.: The relationship between BXO and obesity in boys undergoing circumcision. Global Pediatric Health 2017
- 2. Gargollo P, et al: Balanitis xerotica obliterans in boys. J Urol 2005
- 3. Folaramni SE, et al: Does application of topical steroids for Lichen Sclerosus affect the rate of circumcision? A systematic review. J Pedaitr Surg 2017





Consult 4: Should I circumcise my baby boy?



Benefits of circumcision

Benefit	Direction of evidence	Effect size	Level of evidence	GRADE quality	GRADE strength
Risk of UTI	Positive	0.07-0.023	Level 2	Low- quality	Weak
Risk of HIV	Positive	0.34-0.62	Level 1	High-quality	Strong
Risk of HPV prevalence	Positive	0.57-0.77	Level 1	Moderate- quality	Weak
Risk of HPV incidence	Unclear	NS	Level 2	Low-quality	Weak
Risk of HSV	Positive	0.36-0.91	Level 2	Moderate- quality	Weak
Risk of penile cancer	Positive	0.13-0.83	Level 2	Low-quality	Weak

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When not to circumcise using a standard circumcision procedure?









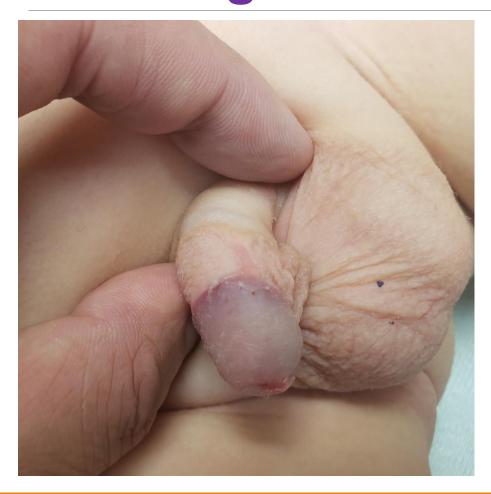
Circumcision complications

- 16 prospective studies, overall median complication rate of 1.5% (0-16%) in neonates and 6% (2-14%) in children¹
- Bleeding and meatal stenosis commonest complications
- Circumcision revision commonest redo-procedure, often for uncircumcised appearance²
- 1. Weiss HA, et al: Complications of circumcision in male neonates, infants and children: a systemic review. BMC Urology 2010
- 2. Pieretti RV, et al: Late complications of newborn circumcision: a common and avoidable problem. Pediatr Surg Int 2010



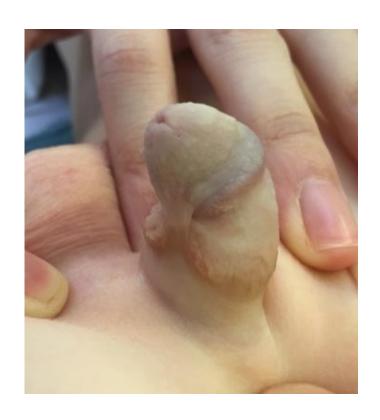


Consult 4: My boy looks different following his circumcision.....





Skin bridges







Suture tracts



Secondary phimosis with PS webbing



Consult 5: Post circumcision abnormal stream









Meatal stenosis

- Incidence post circumcision varies, maybe underestimated as not defined
- Recent SR: Including 27 studies risk 0.65%¹
- Petroleum jelly application decreases risk (RR 0.024; 95% CI 0.0048-0.12)¹
- 1. Morris BJ, et al: Does circumcision increase meatal stenosis risk: a systematic review and meta-analysis. J Urol 2017





Meatoplasty versus meatotomy

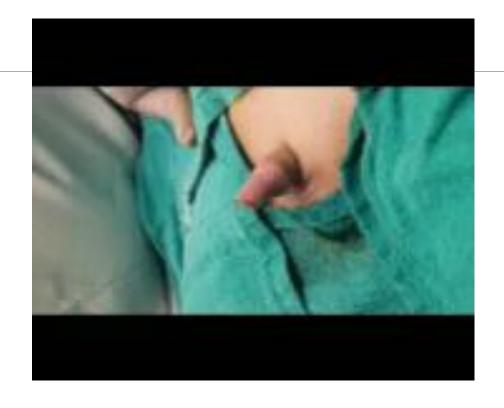
- Need for GA for meatoplasty
- Patient cooperation and anatomy
- Lower recurrence rate following meatoplasty (0.2%) versus meatotomy (3.5%)¹

1. Godley GP, et al: Meatal stenosis: a retrospective analysis of over 4000 patients. J Pediatr Urol 2015













Key take home messages

- Foreskin consults are common but most can be managed without a pediatric urology referral
- Urologists should take the lead in educating our family docs and pediatricians
- Physiological phimosis requires masterly inactivity and expectant waiting
- Recognition of BXO and anatomical variants is warranted
- Circumcision complications are a significant healthcare cost burden and can often be managed in the clinic setting





THANK YOU HAPPY CANADA DAY