

# La fimosi e i suoi fratelli



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# FIMOSI

Cos' è la fimosi e quando possiamo diagnosticarla

Quali sono le problematiche legate alla fimosi?

Quali sono i trattamenti possibili

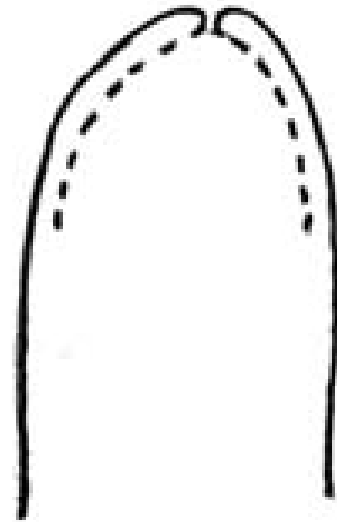
Quali sono i pro e contro dei vari trattamenti

**E I SUOI FRATELLI?**

Cosa vediamo nel neonato?

Nei primi mesi di vita il glande e il prepuzio sono fisiologicamente attaccati l'uno all'altro.

Il prepuzio non può essere quindi retratto fin sotto il glande



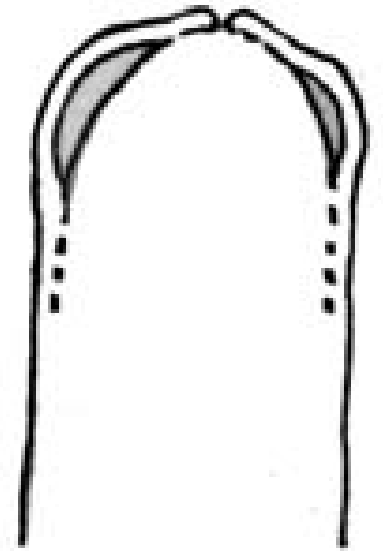
PENE ALLA  
NASCITA CON  
IL PREPUZIO  
ADESO AL  
GLANDE



Gairdner noticed only 4% of newborns in England and Wales had retractable foreskin.

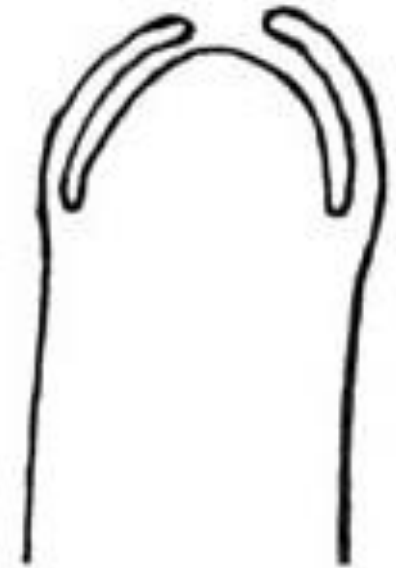
Gairdner D. The fate of the foreskin, a study of circumcision. Br Med J 1949;2:1433-7.

Nei primi mesi/anni di vita,  
la funzione dello smegma  
è quella di accumularsi e  
staccare  
progressivamente il  
prepuzio dal glande



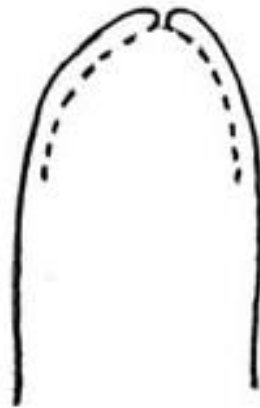
**LO SMEGMA SI  
ACCUMULA  
SOTTO IL PREPUZIO  
INIZIANDO A  
SCOLLARLO**

Nell'arco de primi anni  
questo processo di  
scollamento porta alla  
possibilità di  
«scoperchiamento»  
completo del glande

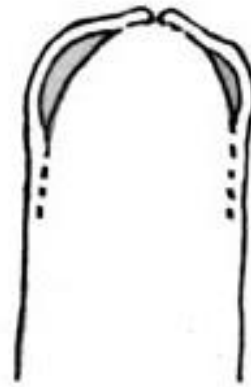


**IL PREPUZIO E'  
COMPLETAMENTE  
SCOLLATO E  
L'APERTURA E'  
SUFFICIENTE A  
FAR FUORIUSCIRE  
IL GLANDE**

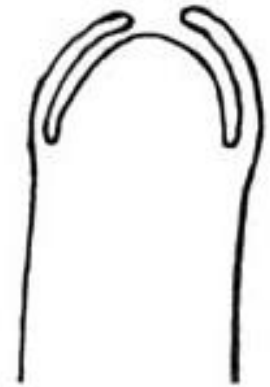
Quindi  
riassumendo:



**PENE ALLA  
NASCITA CON  
IL PREPUZIO  
ADESO AL  
GLANDE**



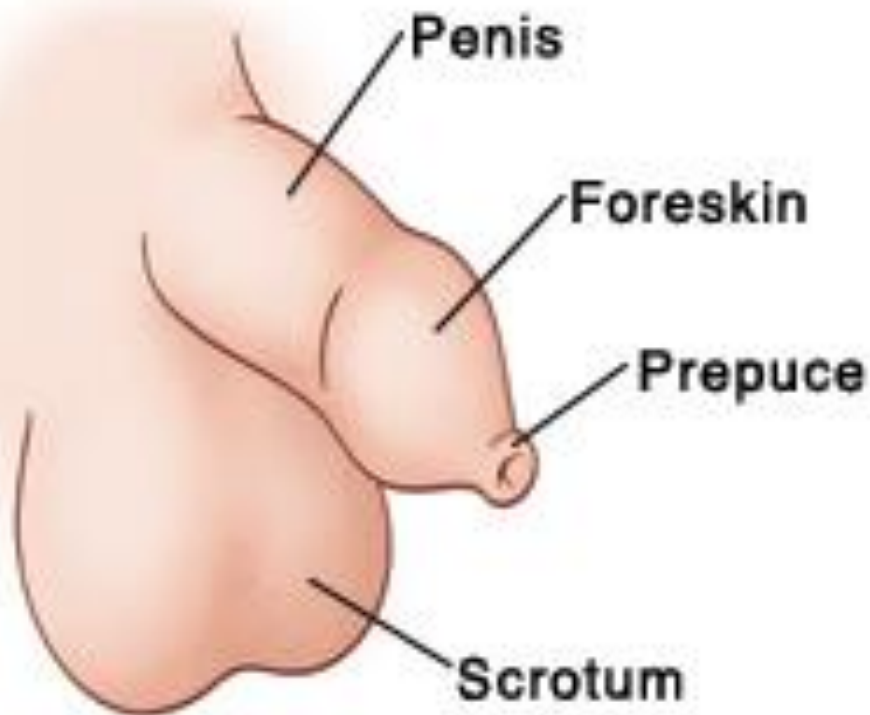
**LO SMEGMA SI  
ACCUMULA  
SOTTO IL PREPUZIO  
INIZIANDO A  
SCOLLARLO**



**IL PREPUZIO E'  
COMPLETAMENTE  
SCOLLATO E  
L'APERTURA E'  
SUFFICIENTE A  
FAR FUORIUSCIRE  
IL GLANDE**



Questa è la situazione che ci aspettiamo di trovare nel bambino fino ai 3-4 anni



Questa è la situazione che ci aspettiamo di trovare nel bambino dai 3-4 anni





Qundi evitiamo di usare il termine FIMOSI per i neonati!

Nei NEONATI non esiste la FIMOSI!

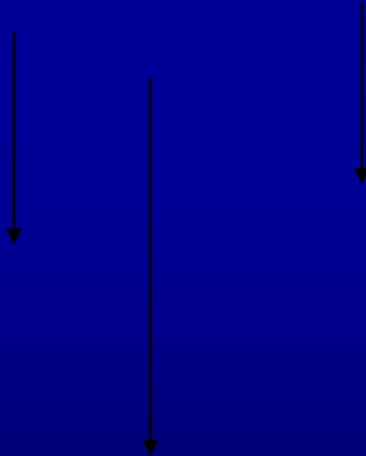
Alcuni Autori propongono  
«Non retraibilità del prepuzio»  
(ma suona comunque come  
qualcosa di «non» normale)



In passato, si riteneva utile iniziare fin dall'età neonatale una “ginnastica prepuziale” che favorisse il progressivo abbassamento del prepuzio.

La flogosi, la fissurazione con cicatrizzazione portavano invece a un risultato opposto.

**Quindi, niente ginnastica per il prepuzio!**

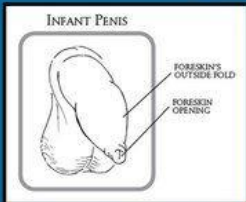


Una volta stabilito che non dobbiamo sforzare, cosa dobbiamo dire alle mamme che ci chiedono consigli su come lavare il pisellino («Sa Dottore, perché non ho esperienza...»)?



# How to Properly Care for an Intact Penis

**If Intact,  
Don't Retract!  
Only Clean  
What is Seen.**



The reason why you do NOT retract (or pull back) any skin is because the foreskin is fused to the penis, just like a fingernail is attached to the finger. Any retracting (at all) can cause this tissue to tear and damage the penis and foreskin.

It's easy to care for an intact penis.

There's no need to pull back the foreskin, just clean it like you would your finger. Only clean what you see. After it has been gently wiped down, you're done!

## Proper intact care is EASY!

**\*When intact, don't retract.**

Ever. Premature forced retraction is painful and can cause permanent damage. No one should retract your child--not even his doctor.

**\*Only clean what is seen.**

It really is that easy. Wipe the outside only. The foreskin is tightly fused to the glans--this keeps germs and contaminants out while allowing urine to exit. There is no need to clean beneath a child's foreskin--ever.

See?

Easy.

facebook.com/IntactOH



I'M INTACT!

DO NOT  
RETRACT!

NO, NOT EVEN  
*'just a little'*

SAVINGSONS.ORG

E' ipotizzabile che questa situazione transitoria di «non scoperchiabilità» sia stata «prevista» con una motivazione finalistica:

quella **di proteggere il glande**, molto più delicato ed irritabile del prepuzio , dal contatto con le feci e le urine nel periodo dell'incontinenza



**Cosa succede successivamente?**

Se dopo i primi 3-4 anni di vita questa progressiva separazione del prepuzio dal glande non avviene, il quadro diventa «patologico» e solo a questo punto viene definito:

# FIMOSI

# ATTENZIONE!

Bisogna però intendersi sul significato del termine «fimosi patologica»: per ora stiamo considerando semplicemente la mancata «evoluzione/maturazione» della situazione fisiologica del neonato e NON una patologia acquisita.



# Distinguiamo 2 tipi di fimosi da «mancata evoluzione»:



IL PREPUZIO E' SCOL-  
LATO MA L'APERTURA  
E'TROPPO STRETTA E  
A FORMA DI PROBO-  
SCIDE. E' UNA FIMOSI



IL PREPUZIO E' SCOL-  
LATO MA L'APERTURA  
E'TROPPO STRETTA  
ANCHE IN QUESTO CASO.  
E' UNA FIMOSI



Quali sono le problematiche legate a questo tipo di fimosi?

# Intanto, quali sono le dimensioni del problema?

- *up to 10% to 38% of 3-year olds,*
- *8% to 16% of 6-year olds*
- *only about 1% of 16-year olds*  
*have nonretractile foreskins*

1. Øster J. Further fate of the foreskin. *Arch Dis Child* 1968;43:200-4.
2. Gairdner D. The fate of the foreskin, a study of circumcision. *Br Med J* 1949;2:1433-7.
3. Yang SSD, Tsai YC, Wu CC, et al. Highly potent and moderately potent topical steroids are effective in treating phimosis: a prospective randomized study. *J Urol* 2005;173:1361-3.
4. Kayaba H, Tamura H, Kitajama S, et al. Analysis of shape and retractability of the prepuce in 603 Japanese boys. *J Urol* 1996;156:1813-5.

Quali disturbi dà “realmente” la persistenza della fimosi “fisiologica”?

L'argomento, come l'organo in questione, è delicato e oggetto di una sorta di “pudore” anche in ambiente medico..



In linea teorica, i disturbi/complicanze legati al persistere della fimosi potrebbero essere:

- Il “fastidio” soggettivo durante l’erezione e in particolare durante i rapporti sessuali
- Maggior rischio di infezioni delle vie urinarie
- La PARAFIMOSI (difficilmente spontanea, ma di solito autoprovocata nel tentativo di abbassare il prepuzio)
- Le ipotetiche complicanze vascolari da restringimento (a tipo infarto/necrosi/gangrena/amputazione)

▪

# Il “fastidio” soggettivo durante l’erezione e in particolare durante i rapporti sessuali

- Questo punto è molto difficile da valutare
- Non ci sono lavori con SCORE
- Nessuno o quasi (paziente e medico) parla volentieri e liberamente di questo argomento...

..e noi siamo Pediatri

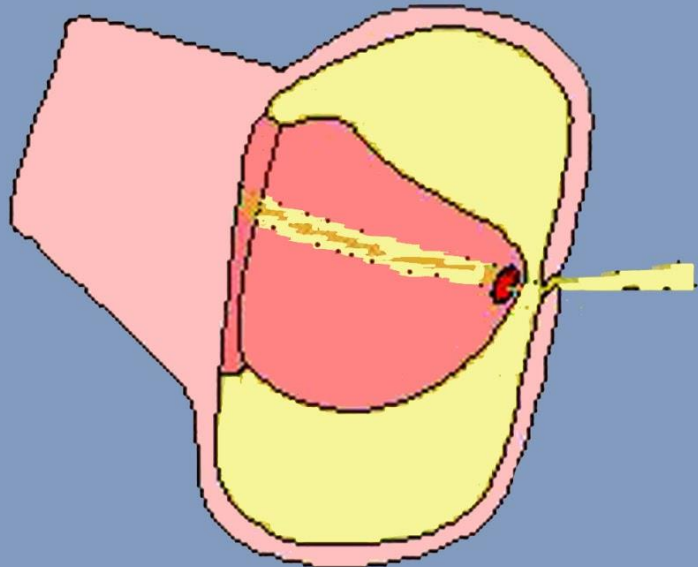
Per gli altri punti, ci sono alcune  
ambiguità da chiarire.....



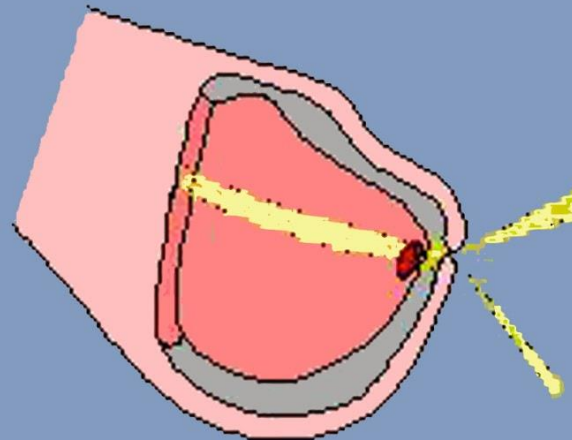
Il “ballooning” della fimosi fisiologica è solo una variante normale della minzione del bambino.....



NORMAL VARIATIONS OF URINATION  
AMONG MALE MINORS IN EARLY STAGES  
OF PREPUCE SEPARATION



BALLOONING



SPRAYING

# Ballooning of the foreskin and physiological phimosis: is there any objective evidence of obstructed voiding?

RAMESH BABU, SARA K. HARRISON\* and KIM A.R. HUTTON

*Departments of Paediatric Surgery and \*Radiology, University Hospital of Wales, Heath Park, Cardiff, UK*

Accepted for publication 27 April 2004

## OBJECTIVES

To determine whether physiological phimosis with or without ballooning of the prepuce is associated with noninvasive urodynamic or radiological evidence of bladder outlet obstruction.

## PATIENTS AND METHODS

From August 2001 to October 2002 all boys with a foreskin problem and referred to one paediatric surgeon were assessed in special clinics. Those with physiological phimosis were recruited for the study and had upper tract and bladder ultrasonography (US), followed by uroflowmetry and US-determined postvoid residual urine volumes (PVR). Data were compared between boys with and with no ballooning of the prepuce. The project was approved by the local research ethics committee and informed consent was obtained from all study participants.

## RESULTS

In all, 54 patients were referred for circumcision; 32 boys with physiological phimosis completed the uroflow and US investigations. Ballooning of the foreskin was present in 18 boys (mean age 6.8 years, range 3–12); 14 had physiological phimosis with no ballooning (mean age 6.5 years, range 4–11). Upper tract US and bladder wall thickness were normal in all boys. The mean maximum urinary flow rate ( $Q_{max}$ ) was not significantly different in boys with ballooning and those without (mean 15.3 mL/s, SD 4.4, range 9–24, vs 15.4, SD 2.9, range 10.7–20,  $P=0.96$ ). In addition, all  $Q_{max}$  values were within the normal range when correlated with voided volume and compared with age-related nomograms. Most boys had flow rate patterns showing a normal bell-shaped curve; a few (9%) had subtle changes in the flow-rate profile, with either a plateau-type curve or slow initial increase in flow and prolonged

time to achieve  $Q_{max}$ . The two groups had comparable mean PVRs (3.5 mL, SD 5.1, range 0–18 with ballooning vs 6.1, SD 10.7, range 0–38 without,  $P=0.37$ ). Only one patient had a marginally abnormal PVR.

## CONCLUSIONS

Physiological phimosis with or without ballooning of the prepuce is not associated with noninvasive objective measures of obstructed voiding. Minor abnormalities in the flow-rate pattern in this patient group deserve further study.

## KEYWORDS

foreskin, phimosis, ballooning, circumcision, children

Maggior rischio di infezioni delle vie urinarie ?

La Letteratura evidenzia IN GENERALE maggior rischio per i NON circumcisi

Se però parliamo i NON circumcisi con MEATO VISIBILE e MEATO NON VISIBILE.....

## Visibility of the urethral meatus and risk of urinary tract infections in uncircumcised boys.

Dubrovsky AS<sup>1</sup>, Foster BJ, Jednak R, Mok E, McGillivray D.

### ⊕ Author information

#### Abstract

**BACKGROUND:** Uncircumcised boys are at higher risk for urinary tract infections than circumcised boys. Whether this risk varies with the visibility of the urethral meatus is not known. Our aim was to determine whether there is a hierarchy of risk among uncircumcised boys whose urethral meatuses are visible to differing degrees.

**METHODS:** We conducted a prospective cross-sectional study in one pediatric emergency department. We screened 440 circumcised and uncircumcised boys. Of these, 393 boys who were not toilet trained and for whom the treating physician had requested a catheter urine culture were included in our analysis. At the time of catheter insertion, a nurse characterized the visibility of the urethral meatus (phimosis) using a 3-point scale (completely visible, partially visible or nonvisible). Our primary outcome was urinary tract infection, and our primary exposure variable was the degree of phimosis: completely visible versus partially or nonvisible urethral meatus.

**RESULTS:** Cultures grew from urine samples from 30.0% of uncircumcised boys with a completely visible meatus, and from 23.8% of those with a partially or nonvisible meatus ( $p = 0.4$ ). The unadjusted odds ratio (OR) for culture growth was 0.73 (95% confidence interval [CI] 0.35-1.52), and the adjusted OR was 0.41 (95% CI 0.17-0.95). Of the boys who were circumcised, 4.8% had urinary tract infections, which was significantly lower than the rate among uncircumcised boys with a completely visible urethral meatus (unadjusted OR 0.12 [95% CI 0.04-0.39], adjusted OR 0.07 [95% CI 0.02-0.26]).

**INTERPRETATION:** We did not see variation in the risk of urinary tract infection with the visibility of the urethral meatus among uncircumcised boys. Compared with circumcised boys, we saw a higher risk of urinary tract infection in uncircumcised boys, irrespective of urethral visibility.

E la PARAFIMOSI?

- La PARAFIMOSI è un problema reale, ma non avviene in genere spontaneamente
- Viene provocata nel bambino più facilmente dai familiari che tentano di forzare il prepuzio



## PARAFIMOSI

La riduzione manuale può essere tentata con metodiche diverse

L'applicazione di un guanto con ghiaccio per 5 minuti aumenta del 90% le possibilità di successo

# Metodo Osmotico

Prima della riduzione manuale, possibile tentare di agire sul versante OSMOTICO:

- Utilizzando zucchero su glande e prepuzio per 2 ore
- Utilizzando impacco di 50 ml di soluzione glucosata al 50%

**ATTENZIONE A NON FARE PASSARE TROPPO TEMPO!**

Treatment options for paraphimosis. Int J Clin Pract. 2005; 59(5):591-3 (ISSN: 1368-5031) Little B; White M



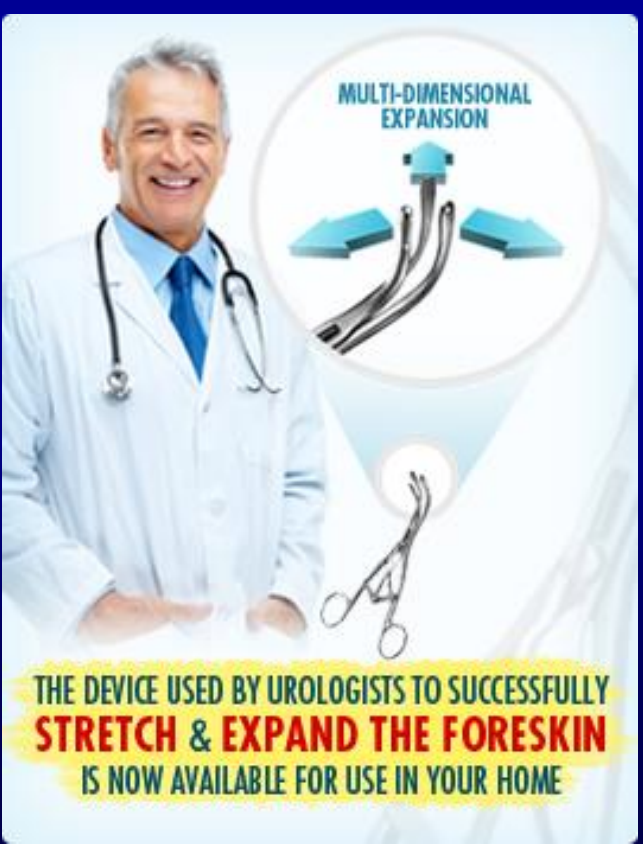


# Le ipotetiche complicanze vascolari da restringimento (a tipo infarto / necrosi / gangrena / amputazione)?

- [Para Phimosis Leading to Glans Gangrene - A Devastating Preventable Complication.](#)
  1. Sokhal AK, Saini DK, Sankhwar S.  
Balkan Med J. 2017 Apr 5;34(2):180-181. doi: 10.4274/balkanmedj.2016.0677. No abstract available.  
PMID: 28418348 [Free PMC Article](#)  
[Similar articles](#) [Remove from clipboard](#)
  
- [Fournier's gangrene of the penis in a 12-year-old patient secondary to phimosis.](#)
  2. Ward L, Eisenson D, Fils JL.  
R I Med J (2013). 2016 Dec 1;99(12):45-46.  
PMID: 27903000  
[Similar articles](#) [Remove from clipboard](#)
  
- [Paraphimosis leading to Fournier's Gangrene.](#)
  3. Ahmed J, Mallick IH.  
J Coll Physicians Surg Pak. 2009 Mar;19(3):203. doi: 03.2009/JCPSP.203203. No abstract available.  
PMID: 19268028  
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Sembra di poter concludere quindi che la FIMOSI da mancata evoluzione della FIMOSI FISIOLOGICA non sia poi una condizione così pericolosa...

SE NON VENGONO FATTI TENTATIVI TERAPEUTICI IMPROPRI!



MULTI-DIMENSIONAL EXPANSION

THE DEVICE USED BY UROLOGISTS TO SUCCESSFULLY **STRETCH & EXPAND THE FORESKIN** IS NOW AVAILABLE FOR USE IN YOUR HOME

The advertisement features a smiling male doctor in a white lab coat with a stethoscope. To his right is a circular inset showing a mechanical device with three blue arrows pointing outwards, labeled 'MULTI-DIMENSIONAL EXPANSION'. Below the doctor, a pair of surgical forceps is shown. At the bottom, a yellow banner contains the text: 'THE DEVICE USED BY UROLOGISTS TO SUCCESSFULLY **STRETCH & EXPAND THE FORESKIN** IS NOW AVAILABLE FOR USE IN YOUR HOME'.

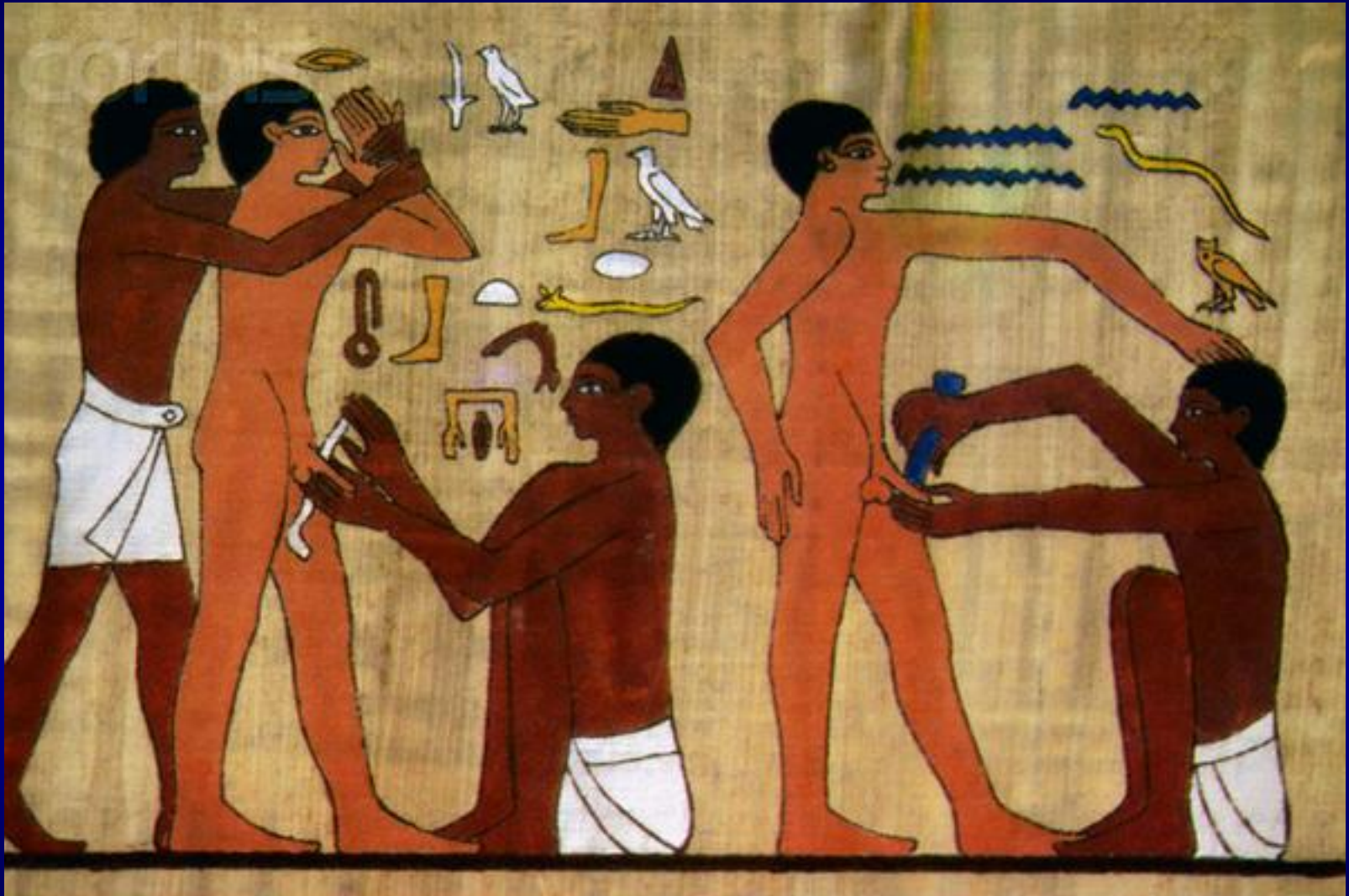
PHIMOSIS  
CURE  
WITHOUT  
SURGERY



FIMOSI

Quali sono i trattamenti possibili?

# World's oldest surgical procedure



Egypt 2,300 BC

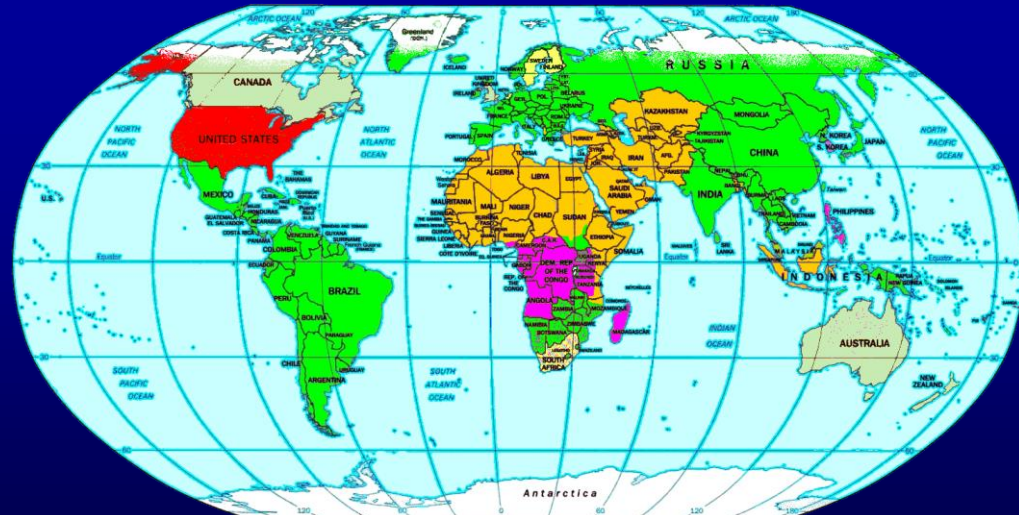
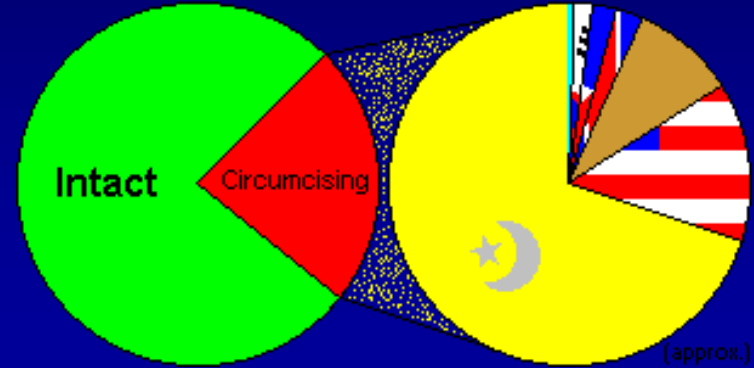
La CIRCONCISIONE “estensiva” è una procedura che ha implicazioni:

1. ETNICHE
2. CULTURALI
3. RELIGIOSE
4. PSICOLOGICHE

.....un pò troppo complicate per essere affrontate in poche slides!

# Global Perspective

- Worldwide, circumcision is rare (~25%)
  - Europe, South America, & most of Asia never adopted it
- UK, Canada, Australia, New Zealand
  - Abandoned circumcision during 1950s-1970s
- Common:
  - Muslim countries & Israel
  - parts of Africa (along with FGM)
  - Philippines, South Korea



La CIRCONCISIONE “terapeutica” deve essere attentamente valutata..

Cosa dicono le Linee Guida Europee?

# EAU GUIDELINES ON PAEDIATRIC UROLOGY

Sea

*(Limited text update March 2017)*

S. Tekgül (Chair), H.S. Dogan, R. Kočvara, J.M. Nijman (Vice-chair), C. Radmayr, R. Stein  
Guidelines Associates: L. 't Hoen, M.S. Silay, S. Undre, J. Quaedackers

## Introduction

Due to the scope of the extended Guidelines on Paediatric Urology, no attempt has been made to include all topics, but rather to provide a selection based on practical considerations.

## PHIMOSIS

Circumcision: indication and contraindication

**Childhood circumcision should not be recommended without a medical reason.**

**An absolute indication for circumcision is secondary phimosis.**

Contraindications for circumcision are acute local infection and congenital anomalies of the penis, particularly hypospadias or buried penis, as the foreskin may be required for a reconstructive procedure.

Plastic circumcision (dorsal incision, partial circumcision) carries the potential for recurrence of phimosis.

Associated frenulum breve is corrected by frenulotomy. Meatoplasty is added if necessary.



# Vengono seguite queste Linee Guida?

[Urologe A](#). 2017 Mar;56(3):351-357. doi: 10.1007/s00120-016-0232-0.

## [Nonretractable foreskin in boys without complaints : An indication for circumcision?]

[Article in German]

Eckert K<sup>1</sup>, Janssen N<sup>2</sup>, Franz M<sup>3</sup>, Liedgens P<sup>4</sup>.

### ⊕ Author information

#### Abstract

**BACKGROUND:** Removing boys' foreskins, even for medical reasons, is increasingly and critically discussed. The aim of this study is to retrospectively verify if the indication for the removal of boys' foreskins was justified. The study is based on the records of boys who underwent preputial operation in an outpatient medical office for pediatric surgery.

**METHODS:** Preoperative clinical findings, complaints, applied conservative and/or surgical procedures and histological results of the resected foreskins of boys, who underwent preputial operation between 2013-2015, were retrospectively analyzed.

**RESULTS:** A total of 176 boys (age 5 on average) underwent a preputial operation. In 85 % of the cases it was completely removed. Most frequent clinical findings (80 %) were that the prepuce was simply not retractable. 86 % of the boys were free of complaints. The most frequent histological findings were a discrete to moderately pronounced chronic fibrous posthitis (69 %) and subepithelial fibrosis (18 %). In the first case 78 % of the boys had been free of complaints, in the latter 72 %.

**CONCLUSION:** The majority of the treated boys were free of complaints; however, most of them underwent a complete removal of their foreskin simply because it was nonretractable. The foreskin represents the most sensitive part of the male genital, preputiolysis is a natural process that can go on until early adolescence. Irreversible surgical procedures, such as a complete foreskin removal, should thus be restricted to a clear medical indication.

La NON retraibilità NON sintomatica non è di per sé una indicazione alla circoncisione!

In caso di FIMOSI “fisiologica” (da mancata evoluzione)  
le condizioni che potrebbe spingerci ad essere  
interventisti potrebbero essere:

Infezioni urinarie o balanopostiti recidivanti

Disturbo “soggettivo”

episodi ripetuti di parafimosi

Anche in presenza di queste condizioni, vanno  
comunque presi in considerazione altri provvedimenti  
prima della circoncisione.....

Importante infatti ricordare che:

- la CIRCUNCISIONE è un intervento irreversibile
- sono possibili (ovviamente) effetti collaterali

## [An unexpected complication: glans ischemia after circumcision. Review of the literature].

[Article in Spanish; Abstract available in Spanish from the publisher]

Cárdenas Elías MÁ<sup>1</sup>, Vázquez Rueda F<sup>2</sup>, Jiménez Crespo V<sup>1</sup>, Siu Uribe A<sup>1</sup>, Murcia Pascual FJ<sup>1</sup>, Betancourth Alvarenga JE<sup>1</sup>, Paredes Esteban RM<sup>1</sup>.

### ⊕ Author information

**Abstract** in [English](#), [Spanish](#)

**INTRODUCTION:** Circumcision is a frequent and common surgical procedure in children; nevertheless it is not completely hassle-free. Post circumcision ischemic complications are even rare and they are generally due to administration of local vasoconstrictor anesthetics. There are few cases reported in the literature. We report the management and treatment of post- circumcision penile ischemia (PCI).

**CASE REPORT:** A 10 years old patient who underwent circumcision and a dorsal penile nerve block DPNB presents signs of penile ischemia two hours after surgery without any other symptoms. Ultrasonography shows weak flow of the penile artery, with progressive worsening. 24 hours later we start treatment with pentoxifylline (PTX) that is maintained for 6 days, topical testosterone and a caudal blocking (for 48 hours). The patient evolved favorably within a few hours and there was complete resolution in 6 days.

**DISCUSSION:** We analyze 9 cases of pediatric patients which were described in the literature. 7 cases (77.7 %) received DPNB. The PCI is an unusual complication of circumcision, and DPNB seems to be the most frequent cause. Several therapeutic options are available for its management, but none is protocolised.



E allora ?



## Topical corticosteroids for treating phimosis in boys.

Moreno G<sup>1</sup>, Corbalán J, Peñaloza B, Pantoja T.

### ⊕ Author information

#### Abstract

**BACKGROUND:** Until recently, phimosis has been treated surgically by circumcision or prepuceplasty; however, recent reports of non-invasive treatment using topical corticosteroids applied for four to eight weeks have been favourable. The efficacy and safety of topical corticosteroids for treating phimosis in boys has not been previously systematically reviewed.

**OBJECTIVES:** We aimed to 1) compare the effectiveness of the use of topical corticosteroid ointment applied to the distal stenotic portion of the prepuce in the resolution of phimosis in boys compared with the use of placebo or no treatment, and 2) determine the rate of partial resolution (improvement) of phimosis, rate of re-stenosis after initial resolution or improvement of phimosis, and the rate of adverse events of topical corticosteroid treatment in boys with phimosis.

**SEARCH METHODS:** We searched the Cochrane Renal Group's Specialised Register through contact with the Trials' Search Co-ordinator using search terms relevant to this review. Date of last search: 16 June 2014.

**SELECTION CRITERIA:** We included all randomised controlled trials (RCTs) that compared use of any topical corticosteroid ointment with placebo ointment or no treatment for boys with phimosis.

**DATA COLLECTION AND ANALYSIS:** Two authors independently assessed titles, abstracts and the full-text of eligible studies, extracted data relating to the review's primary and secondary outcomes, and assessed studies' risk of bias. Statistical analyses were performed using the random-effects model and results were expressed as risk ratios (RR) for dichotomous outcomes with 95% confidence intervals (CI). We contacted authors of primary articles asking for details of study design and specific outcome data.

**AUTHORS' CONCLUSIONS:** Topical corticosteroids offer an effective alternative for treating phimosis in boys. Although sub optimal reporting among the included studies meant that the size of the effect remains uncertain, corticosteroids appear to be a safe, less invasive first-line treatment option before undertaking surgery to correct phimosis in boys.

# TERAPIA CORTISONICA TOPICA PER LA FIMOSI

Dal punto di vista pratico:

- più del 95% dei casi risponde
- sono state descritte recidive ( a distanza di mesi), ma il trattamento è ripetibile
- Il costo della terapia topica è – del 27 % di quello della terapia chirurgica
- Non ci sono complicanze significative e/o irreversibili della terapia topica

E se non è efficace la TERAPIA CORTISONICA  
TOPICA?



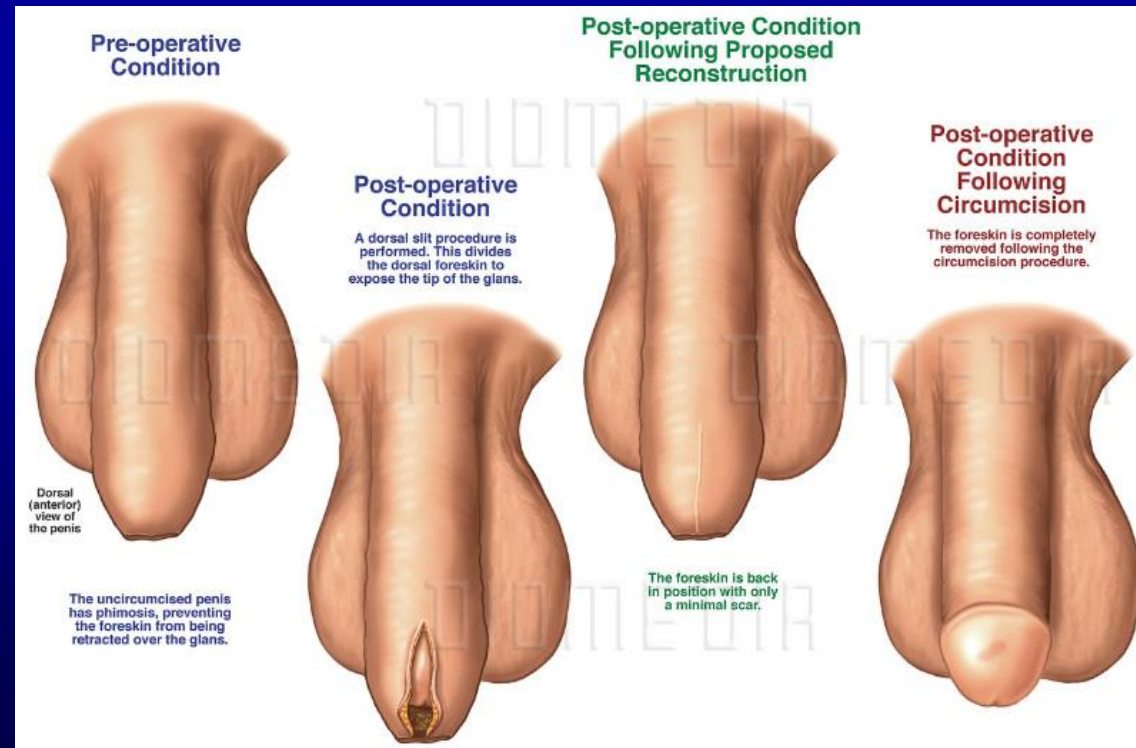


# E se non è efficace la TERAPIA CORTISONICA TOPICA?

Sono disponibili tecniche chirurgiche conservative come ad esempio:

## DORSAL SLIT

Consentono il mantenimento del prepuzio  
Possono andare incontro a recidive



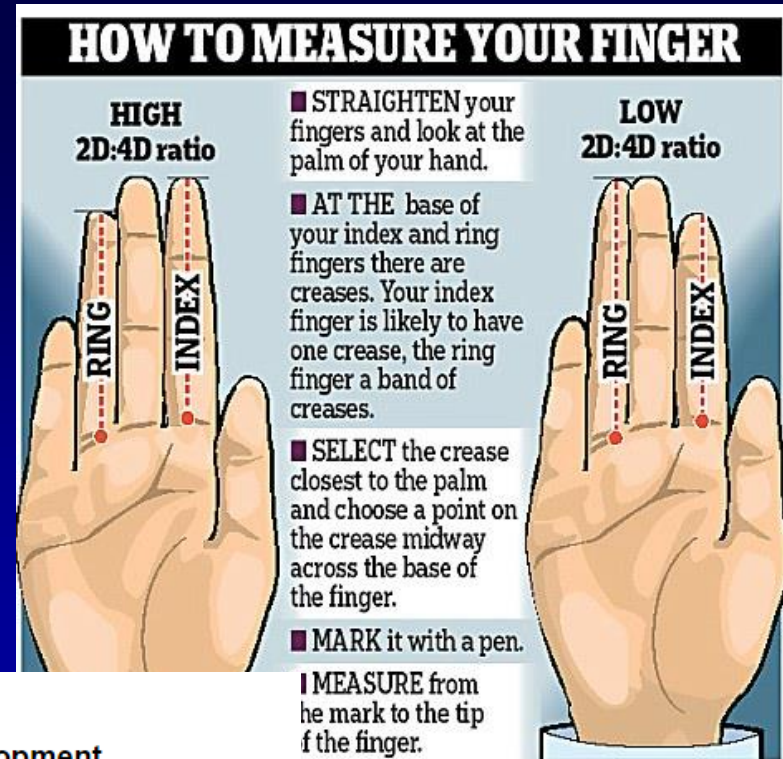
Abbiamo finora parlato della Non retrattilità fisiologica del prepuzio nel neonato e della “fimosi” da mancata evoluzione (nel bambino più grande) di questa condizione.....

Ma è possibile prevedere chi manterrà lo stato di  
“fimosi congenita” crescendo ?



# CONCLUSIONS:

These results suggest that a higher R2D:4D (right hand 2D:4D) is a risk factor for phimosis in the early human development.



[Early Hum Dev.](#) 2016 Aug;99:21-5. doi: 10.1016/j.earlhumdev.2016.05.013. Epub 2016 Jul 4.

**2D:4D** indicates phimosis risk: A study on digit ratio and early foreskin development.

Li G<sup>1</sup>, Huo Y<sup>2</sup>, Sun K<sup>3</sup>, Wang X<sup>3</sup>, Li H<sup>3</sup>, Gao L<sup>1</sup>, Ma B<sup>4</sup>.

⊕ Author information

## Abstract

**BACKGROUND:** Many researchers have adopted 2D:4D (second to fourth finger length ratio) as a noninvasive retrospective biomarker for prenatal androgen exposure in recent years. It is thought to be related to diverse traits including behavioral phenotypes, disease susceptibility, and development of urogenital system.

**OBJECTIVE:** To examine the relationship between 2D:4D and early foreskin development.

**METHODS:** We analyzed the digit ratio and foreskin condition in 176 cases (range 0-6years). The boys were divided into four groups according to their ages: group 1, neonates (below 28days, n=13); group 2, infants (1-12months, n=45); group 3, toddlers (1-2years old, n=42); group 4, preschool children (3-6years old, n=76). We measured the lengths of the second and fourth digits of the left and right hands. The foreskin status was classified into 4 types. Type I (phimosis), type II (partial phimosis), type III (adhesion of prepuce), type IV (normal).

**RESULTS:** The phimosis rate was 92.3%, 82.2%, 45.2%, and 38.7% in group 1 to group 4. In contrast, the proportion of normal foreskin increased from 0% in neonates to 13.2% in preschool children. The percentage of higher level of foreskin development shows a downward trend with the increase of digits ratio, and as the age grows, the percentage of normal foreskin cases also increases.

**CONCLUSIONS:** These results suggest that a higher R2D:4D (right hand 2D:4D) is a risk factor for phimosis in the early human development. Age is also a significant influence factor of foreskin conditions. Additional research is required to identify pathophysiologic mechanisms and to determine clinical significance.

# E I FRATELLI DELLA FIMOSI?



**Between 1725 and 1765, a woman married to a Russian farmer, had 69 children from her husband Feodor Vassilyev.**

Abbiamo finora parlato  
della fimosi derivante  
dalla mancata  
evoluzione della fimosi  
fisiologica del  
neonato/lattante...



Ma la FIMOSI può essere invece  
ACQUISITA?

La causa più comune di FIMOSI ACQUISITA è il danno autoimmunitario tipico della condizione nota come....



# LICHEN SCLERO ATROFICO

## Balanite Xerotica Obliterante

Il Lichen Sclero atrofico / Balanite xerotica obliterante è infatti caratterizzato da 3 sintomi principali

*1. Fimosi acquisita*

*2. Banderella costrittiva biancastra*

*3. Stenosi del meato uretrale*

La FIMOSI ACQUISTA  
del LICHEN  
SCLEROATROFICO  
non si presenta in  
modo clinicamente  
diverso da quella  
congenita....



Il Lichen Sclero atrofico / Balanite xerotica obliterante è infatti caratterizzato da 3 sintomi principali

1. *Fimosi acquisita*

2. **Banderella costrittiva biancastra**

3. *Stenosi del meato uretrale*



Banderella costringente  
biancastra sotto il solco  
balano prepuziale

Il Lichen Sclero atrofico / Balanite xerotica obliterante è infatti caratterizzato da 3 sintomi principali

1. *Fimosi acquisita*

2. *Banderella costrittiva biancastra*

3. **Stenosi del meato uretrale**



Quante fimosi trattate chirurgicamente si rivelano essere poi LSA?



Minerva Pediatr. 2007 Dec;59(6):761-5.

**[Lichen sclerosus in children with phimosis].**

[Rossi E](#), [Pavanello P](#), [Franchella A](#).

Unità Operativa di Chirurgia Pediatrica, Azienda Ospedaliera Universitaria, Arcispedale S. Anna, Ferrara. dr\_ross28@hotmail.com

**Abstract**

. **Of the patients with severe phimosis 26 (36.6%) showed histologic evidence of lichen sclerosus** of the foreskins.

J Pediatr Urol. 2009 Jun;5(3):178-80. Epub 2009 Jan 12.

Routine biopsies in pediatric circumcision: (non) sense?

[Bochove-Overgaauw DM](#), [Gelders W](#), [De Vylder AM](#).

Department of Urology, Jeroen Bosch Hospital, 's-Hertogenbosch, The Netherlands. dmovergaauw@yahoo.com

**Abstract**

**CONCLUSIONS:** **In this study, 27% of all biopsies were positive for BXO.** The results show that the diagnosis BXO must be based on biopsy, because clinical findings underestimated the incidence of BXO by almost 50

Come si tratta il LSA?

## Topical interventions for genital lichen sclerosis.

Chi CC<sup>1</sup>, Kirtschig G, Baldo M, Brackenbury F, Lewis F, Wojnarowska F.

### ⊕ Author information

#### Abstract

**BACKGROUND:** Lichen sclerosis is a chronic, inflammatory skin condition that most commonly occurs in adult women, although it may also be seen in men and children. It primarily affects the genital area and around the anus, where it causes persistent itching and soreness. Scarring after inflammation may lead to severe damage by fusion of the vulval lips (labia); narrowing of the vaginal opening; and burying of the clitoris in women and girls, as well as tightening of the foreskin in men and boys, if treatments are not started early. Affected people have an increased risk of genital cancers.

**OBJECTIVES:** To assess the effects of topical interventions for genital lichen sclerosis and adverse effects reported in included trials.

**SEARCH METHODS:** We searched the following databases up to 16 September 2011: the Cochrane Skin Group Specialised Register, the Cochrane Central Register of Controlled Trials (CENTRAL) in The Cochrane Library, MEDLINE (from 2005), EMBASE (from 2007), LILACS (from 1982), CINAHL (from 1981), British Nursing Index and Archive (from 1985), Science Citation Index Expanded (from 1945), BIOSIS Previews (from 1926), Conference Papers Index (from 1982), and Conference Proceedings Citation Index - Science (from 1990). We also searched ongoing trial registries and scanned the bibliographies of included studies, published reviews, and papers that had cited the included studies.

**SELECTION CRITERIA:** Randomised controlled trials (RCTs) of topical interventions in genital lichen sclerosis.

**AUTHORS' CONCLUSIONS:** The current limited evidence demonstrates the efficacy of clobetasol propionate, mometasone furoate, and pimecrolimus in treating genital lichen sclerosis. Further RCTs are needed to determine the optimal potency and regimen of topical corticosteroids, examine other topical interventions, assess the duration of remission or prevention of flares, evaluate the reduction in the risk of genital squamous cell carcinoma or genital intraepithelial neoplasia, and examine the efficacy in improving the quality of the sex lives of people with this condition.

**TABLE 1.** *Summary of Treatment Options for Pediatric Lichen Sclerosus (LS)*

Treatment option	Therapeutic effect	Side effects	Literature support	Level of evidence in children and adults*
Topical corticosteroids	<ul style="list-style-type: none"> <li>• Anti-inflammatory</li> <li>• Vasoconstrictive</li> <li>• Occlusive</li> </ul>	<ul style="list-style-type: none"> <li>• Skin atrophy</li> <li>• Hypopigmentation</li> <li>• Burning sensation</li> <li>• Irritation</li> <li>• Adrenal suppression</li> </ul>	Chi et al (37) Focseneanu et al (38) Kiss et al (43) Fischer and Rogers (39) Garzon and Paller (40) Vincent and Mackinnon (41) Jørgensen and Svensson (42) Smith and Quint (44)	Ib; Ia (supportive)
Topical immune modulators	<ul style="list-style-type: none"> <li>• Antiinflammatory</li> </ul>	<ul style="list-style-type: none"> <li>• Burning sensation</li> <li>• Black box warning of skin cancer and lymphomas</li> </ul>	Chi et al (37) Goldstein et al (46) Hengge et al (47) Matsumoto et al (49)	IIa; Ia (supportive)
Oral retinoids	<ul style="list-style-type: none"> <li>• Antiinflammatory</li> <li>• Antiproliferative</li> <li>• Normalization of epithelial keratinocyte differentiation</li> </ul>	<ul style="list-style-type: none"> <li>• Dry skin</li> <li>• Arthralgias, back pain</li> <li>• Hyperglycemia, dyslipidemia</li> <li>• Tinnitus</li> <li>• Visual disturbance</li> <li>• Increased intracranial pressure</li> <li>• Inflammatory bowel disease</li> <li>• Teratogenicity</li> <li>• Depression, suicidal ideation</li> </ul>	Bousema et al (50) Ioannides et al (51) Niinimaki et al (52) Virgili et al (53)	III; Ib (supportive) (adults)
Topical androgens, estrogen, progesterone	<ul style="list-style-type: none"> <li>• Tissue strengthening</li> <li>• Increased capillary perfusion</li> <li>• Stimulation of fibroblast proliferation</li> </ul>	<ul style="list-style-type: none"> <li>• Acne</li> <li>• Clitoromegaly</li> <li>• Hirsutism</li> <li>• Irregular menstruation</li> </ul>	Val and Almeida (34) Chi et al (37) Friedrich (54)	III; Ia (nonsupportive) (adults)

Pediatric Dermatology 1-7, 2015

## Pediatric Lichen Sclerosus: A Review of the Epidemiology and Treatment Options

Lana X. Tong, B.A.,\*,† Grace S. Sun, M.D.,‡ and Joyce M.C. Teng, M.D., Ph.D.‡

Ci sono gli stessi rischi a  
circoncidere una fimosi congenita  
e una fimosi da LSA?

## Bleeding after circumcision is more likely in children with lichen sclerosus (balanitis xerotica obliterans).

Somov P<sup>1</sup>, Chan BK<sup>2</sup>, Wilde C<sup>2</sup>, Corbett H<sup>2</sup>.

### ⊕ Author information

#### Abstract

**INTRODUCTION:** Over 27,000 circumcisions were performed in England in 2012-13. The complication rate is generally perceived to be low, although published figures vary widely. Balanitis xerotica obliterans, more correctly termed Lichen Sclerosus et atrophicus (LS), is one of the commonest indications for medical circumcision. To test the hypothesis that children undergoing circumcision for LS have a higher rate of postoperative bleeding than those undergoing the procedure for other reasons, we retrospectively reviewed records for patients undergoing circumcision.

**METHODS:** The disease and procedure coding system was used to identify patients who underwent circumcision (ICD10 code N303) between 2000-2010. Cases with a diagnosis unrelated to circumcision and children circumcised during hypospadias repair were excluded. Bleeding which required return to theatre for surgical arrest was considered significant. Cases were identified by review of medical records if there was: a second procedure during the same admission, or readmission coded for circumcision within 2 weeks. Only cases with histologically confirmed LS were included in the LS cohort. GraphPad online calculator was used for statistical analysis (two tailed Fisher's exact test).

**RESULTS:** 2385 boys with a median age of 4 years (range 0-16) were included in the study. Indication for circumcision included religious (1305, 54.7%), phimosis or redundant prepuce (512, 21.5%), suspected LS (366, 15.4%) and balanoposthitis (202, 8.5%). LS was histologically confirmed in 262 (10.9%) boys. Fourteen (0.6%) patients returned to theatre for surgical arrest of bleeding following circumcision; 6 had LS and 8 did not (Table 1). **The bleeding rate was higher in those with LS (2.3%) than in those without (0.3%), P = 0.0003 with a relative risk of 6.08.**

**CONCLUSION:** Post-operative complications are distressing, especially if further surgery is required. Published figures for complications following circumcision vary widely making counseling regarding risk difficult. Since LS includes an inflammatory element and circumcision in widespread LS can be challenging, the observation of more post-operative bleeding in patients with histologically confirmed LS during a previous audit prompted the hypothesis that this may be a significant finding. Thus we reviewed all patients requiring return to theatre within 2 weeks of circumcision, finding that whilst the overall bleeding rate was low, circumcision for LS significantly increased the risk. Although factors such as the severity of LS and surgical technique were not assessed, this is still a notable finding which should be reflected during pre-operative counseling.

Qual è il legame tra il LSA e le altre patologie autoimmunitarie ?

# Pediatric Lichen Sclerosus: A Review of the Epidemiology and Treatment Options

Lana X. Tong, B.A.,\*,† Grace S. Sun, M.D.,‡ and Joyce M.C. Teng, M.D., Ph.D‡

## Epidemiology and Etiology

LS has an estimated prevalence of 1:60 to 1:1,000 in adults and children in the United States (2,9). Its true prevalence is difficult to estimate because many patients are asymptomatic and may also be hesitant to report their condition, in addition to a frequent incidence of misdiagnosis (10).

The etiology of LS is complex and probably multifactorial. Because of its association with other autoimmune diseases, such as alopecia areata and thyroid disease, and a family history of autoimmune conditions, it is thought that the pathogenesis of LS is possibly autoimmune with underlying genetic predisposition, which recent studies have supported (11,12). Thyroid disease has been shown to have a prevalence in LS patients 5 to 30 times greater than in the general population. LS has been shown to run in families, and human leukocyte antigen DR and DQ haplotypes are thought to play a role in pathogenesis (13).



## Clinical Features, Complications and Autoimmunity in Male Lichen Sclerosus.

Kantere D<sup>1</sup>, Alvergren G, Gillstedt M, Pujol-Calderon F, Tunbäck P.

### ⊕ Author information

#### Abstract

Lichen sclerosus is a chronic inflammatory disease associated with substantial morbidity. Knowledge of the aetiology and progression of lichen sclerosus is therefore needed. In this cross-sectional study, 100 male patients diagnosed with lichen sclerosus were interviewed and examined. Since there is a possible link between lichen sclerosus and autoimmunity, blood tests were analysed for thyroid disease, antinuclear antibodies and antibodies to extracellular matrix protein 1, but autoimmunity was found to be infrequent. In 72 participants active genital lichen sclerosus was observed and complications were common; 27 patients had preputial constriction and 12 meatal engagement. In total, 13 patients needed a referral to the Department of Urology, including 1 patient with suspected penile cancer. In conclusion, despite available treatment with ultra-potent steroids and circumcision, lichen sclerosus in males is frequently complicated by phimosis and meatal stenosis. However, the disease can also go into remission, as seen in 27% of our patients.

, but autoimmunity was found to be infrequent.

Per concludere, diamo un'occhiata alle..  
**ALTRE ANOMALIE DEL PREPUZIO**



# ANOMALIE DEL PREPUZIO

Alcune sono presenti alla nascita (ma transitorie)

MILIUM DEL PREPUZIO  
(autorisolutivo in mesi)



# ANOMALIE DEL PREPUZIO

Alcune sono presenti alla nascita (ma transitorie)

Xantogranuloma giovanile  
(autorisolutivo in anni)



# ANOMALIE DEL PREPUZIO

Alcune sono invece acquisite e di origine infettiva

Infezione stafilococcica  
DEL PREPUZIO



# ANOMALIE DEL PREPUZIO

Alcune sono invece acquisite e di origine infettiva

## SCABBIA DEL PREPUZIO



# ANOMALIE DEL PREPUZIO

Alcune sono invece a comparsa non neonatale, ma non di origine infettiva

Eczema costituzionale



# ANOMALIE DEL PREPUZIO

In questa sede sono possibili anche problemi di tipo  
autoimmunitario

Vitiligine





# Trauma del prepuzio



Il pizzicamento del prepuzio nella cerniera lampo.  
E' una esperienza spiacevole, dolorosa, ma  
generalmente non pericolosa.

L'aspetto del prepuzio appena pizzicato è quello a  
“pantaloni anni 70”, a zampa di elefante. La completa  
restitutio ad integrum è la regola



# CONCLUSIONI: Cosa ricordare di questa relazione?

WHEN INTACT





Grazie  
dell'attenzione!

70

9 - 10 MARZO 2018

NH Laguna Palace Venezia

Minicorso di Dermatologia Pediatrica  
GIORNATA VENEZIANA  
DI DERMATOLOGIA NEONATALE



VENERDÌ 9 MARZO 2017

RISCOPRIAMO LA CLINICA DALLE LESIONI ELEMENTARI

- 08.45 Saluto
- 09.00 Petecchie, porpora etc...
- 09.30 Lesioni anulari
- 10.00 Lesioni lineari
- 10.30 Chiazze chiare
- 11.00 Pausa
- 11.20 Lesioni papulari e nodulari
- 11.50 Tumeffazioni
- 12.20 Capelli spezzati, cadaverizzati, bianchi, assenti...  
*I Relatori commentano le foto Cliniche del vostro smartphone*  
*(Speditele alla nostra mail/WhatsApp durante il Congresso)*
- 12.30 Pausa

TERAPIA|E CASI CLINICI

- 14.00 L'uso della terapia alternativa  
in Dermatologia Pediatrica: overview
- 14.30 Farmaci biologici e sistemici in Dermatologia Pediatrica: oggi
- 15.00 Panoramica sui prodotti non farmacologici disponibili in  
Dermatologia Pediatrica: shampoo, detergenti,  
idratanti/emollienti per la Dermatite atopica
- 15.30 Terapia nutrizionale in Dermatologia Pediatrica:  
quando si e quando proprio no
- 16.00 Ma come si cura la Psoriasi in età Pediatrica?
- 17.00 Reazioni cutanee a farmaci dermatologici e no
- 17.30 Terapia Zero: quando astenersi è meglio
- 18.00 Casi clinici degli specializzandi e casi clinici interattivi
- 18.30 Cocktail

SABATO 10 MARZO 2018

MINICORSO DI DERMATOLOGIA NEONATALE

- 09.00 La bocca del neonato
- 09.30 Mani e piedi nel neonato: cosa osservare
- 10.00 Tumeffazioni neonatali
- 10.30 Nevi melanocitici nel neonato:  
modalità di presentazione clinica, annessi e connessi
- 11.00 Pausa
- 11.20 Skin Care nel neonato a termine e pretermine. A che punto siamo?
- 11.50 Il neonato con bolle: uno schema per orientarsi
- 12.20 Una checklist dermatologica per il neonato
- 12.50 Casi clinici neonatali
- 13.20 Estrazione premi, stop e saluti
- 12.50 Casi clinici neonatali
- 13.20 Estrazione premi, stop e saluti