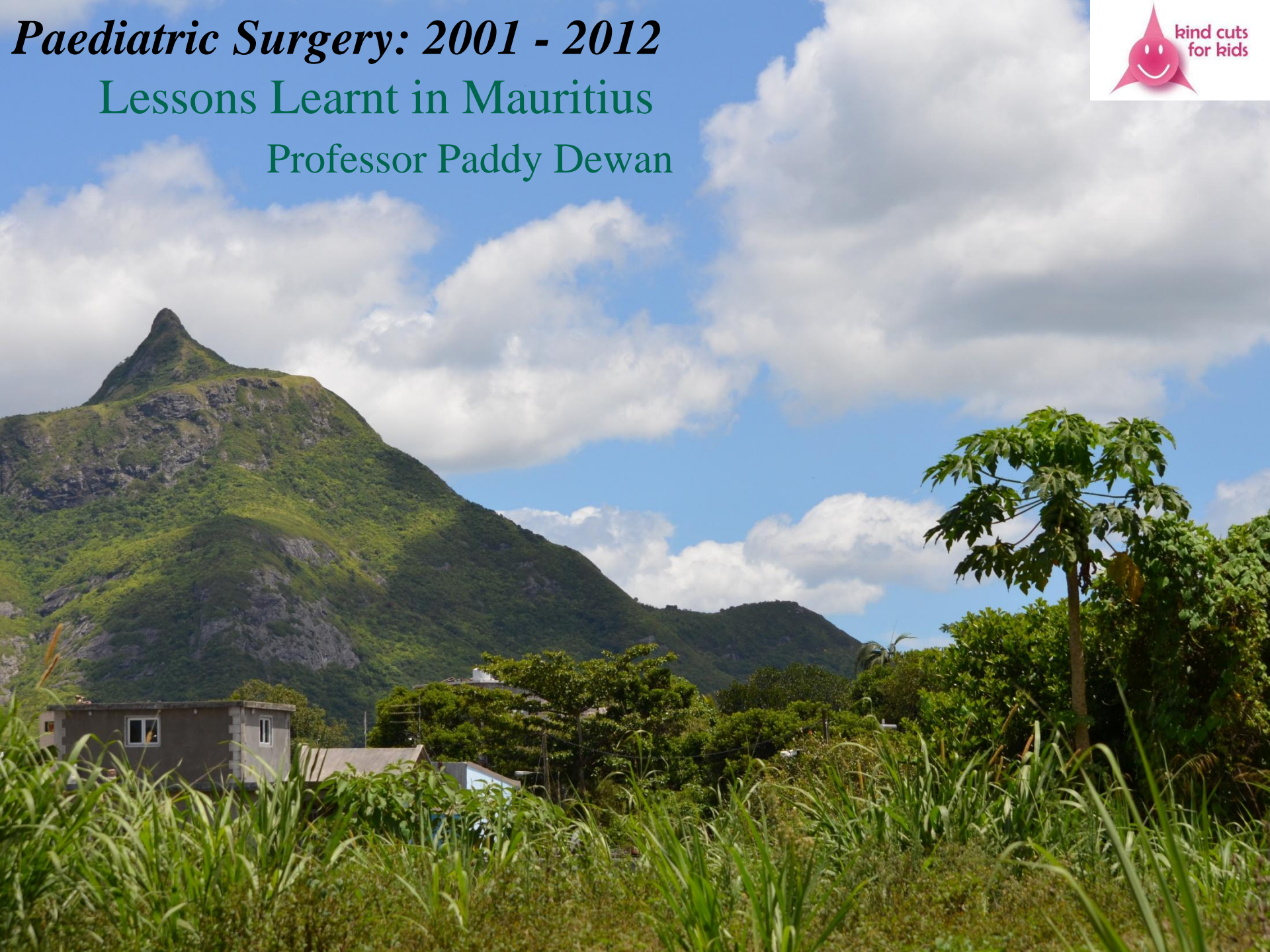


Paediatric Surgery: 2001 - 2012

Lessons Learnt in Mauritius

Professor Paddy Dewan





Mauritian Tourism



Mauritian Holiday Luggage!

The boy who started it all!





Mauritian Paediatric Surgery - 2001

Mauritian Paediatric Surgery

2012





Mauritian Children



Paediatric Advances - 2001 to 2012

Nursing

Janine Goodram

Caron Oakley

Rose Wilson



Paediatric Advances - 2001 to 2012

Surgery

Anwar Fakim

Hosany Nazeer

Naresh Burton

Kevin Teerovengardum

Mclee Matthew

Dritan Alushani



Paediatric Advances - 2001 to 2012

Anaesthesia

Rick Horton

Andrew Jeffreys

Ken Brownhill

Colin Gordon

David Allen

Justine McCarthy

Radiology

Padma Rao



Advances – Caudal Anaesthesia



Advances – Caudal Anaesthesia



Anaesthesia Advances – Neonatal Care



Anaesthesia Advances – Major Cases



Radiology Advances – Dr Padma Rao

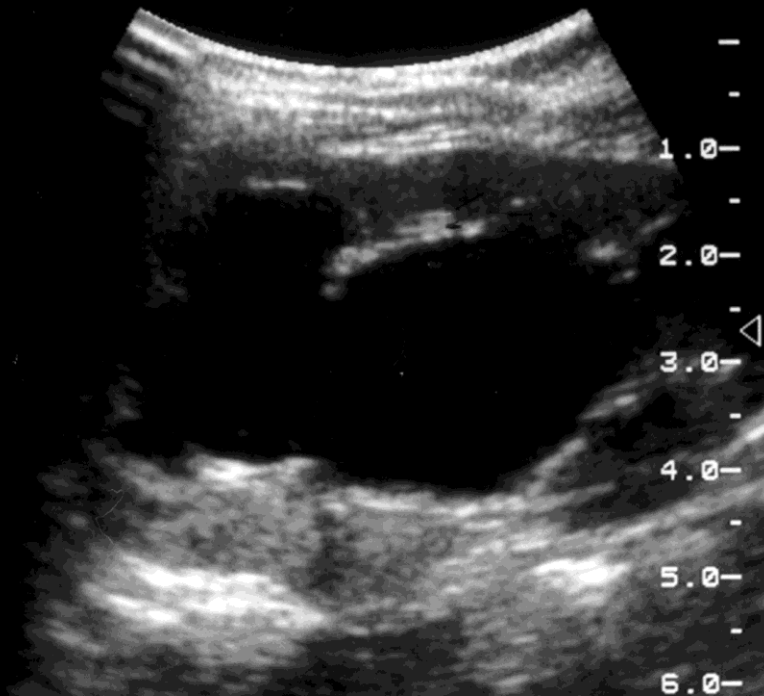


Radiology Advances – Radiation Safety (Coning)



Radiology Advances – Radiation Safety (Ix Selection)

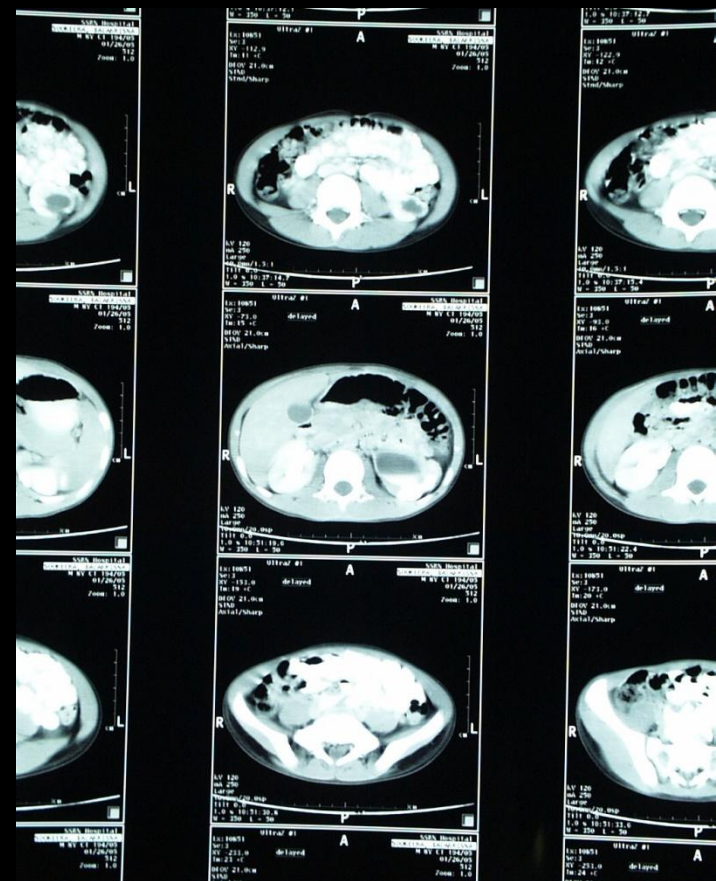
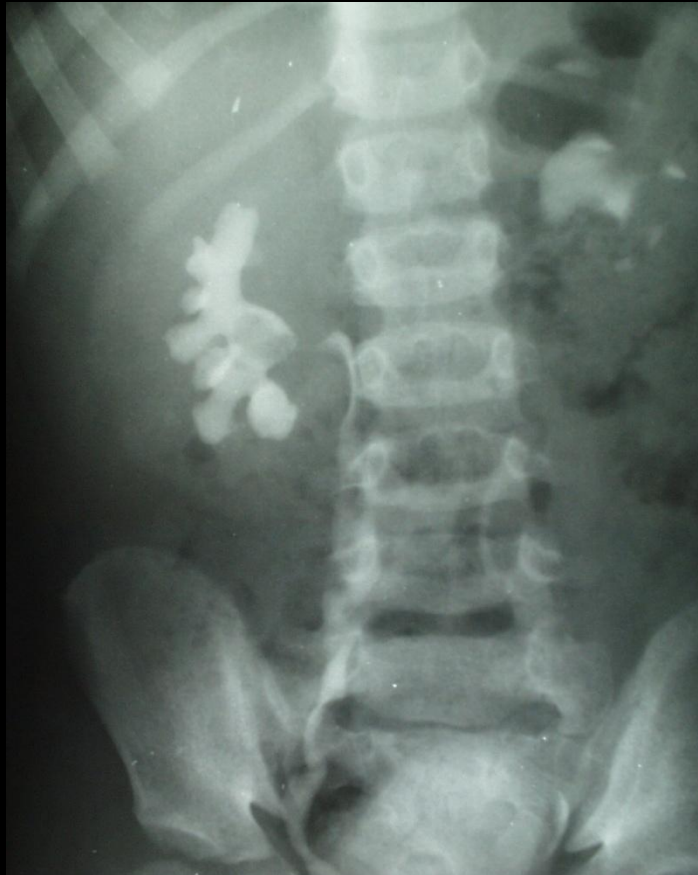
Ultrasound



Nuclear Medicine



Radiology Advances – Radiation Safety (Ix Selection)



Radiation increases cancer risk in children

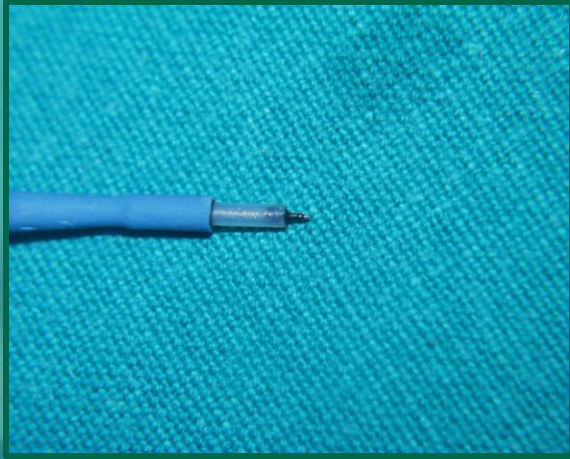
Nursing Advances – Theatre Management



Nursing Advances – Theatre Management



Nursing Advances – Inventory Items



Nursing Advances – Inventory Items



First Visit - 2001

- 5 Days
- 52 Outpatients
- 9 Operated patients
- 32 Operative hours



Second Visit - 2002

- 8 Days
- 82 Patients
- 21 Operations
- 56 Operative hours



Eighth Visit - 2007

- 13 Days
- 138 Patients
- 35 Operations
- 95 Operative hours

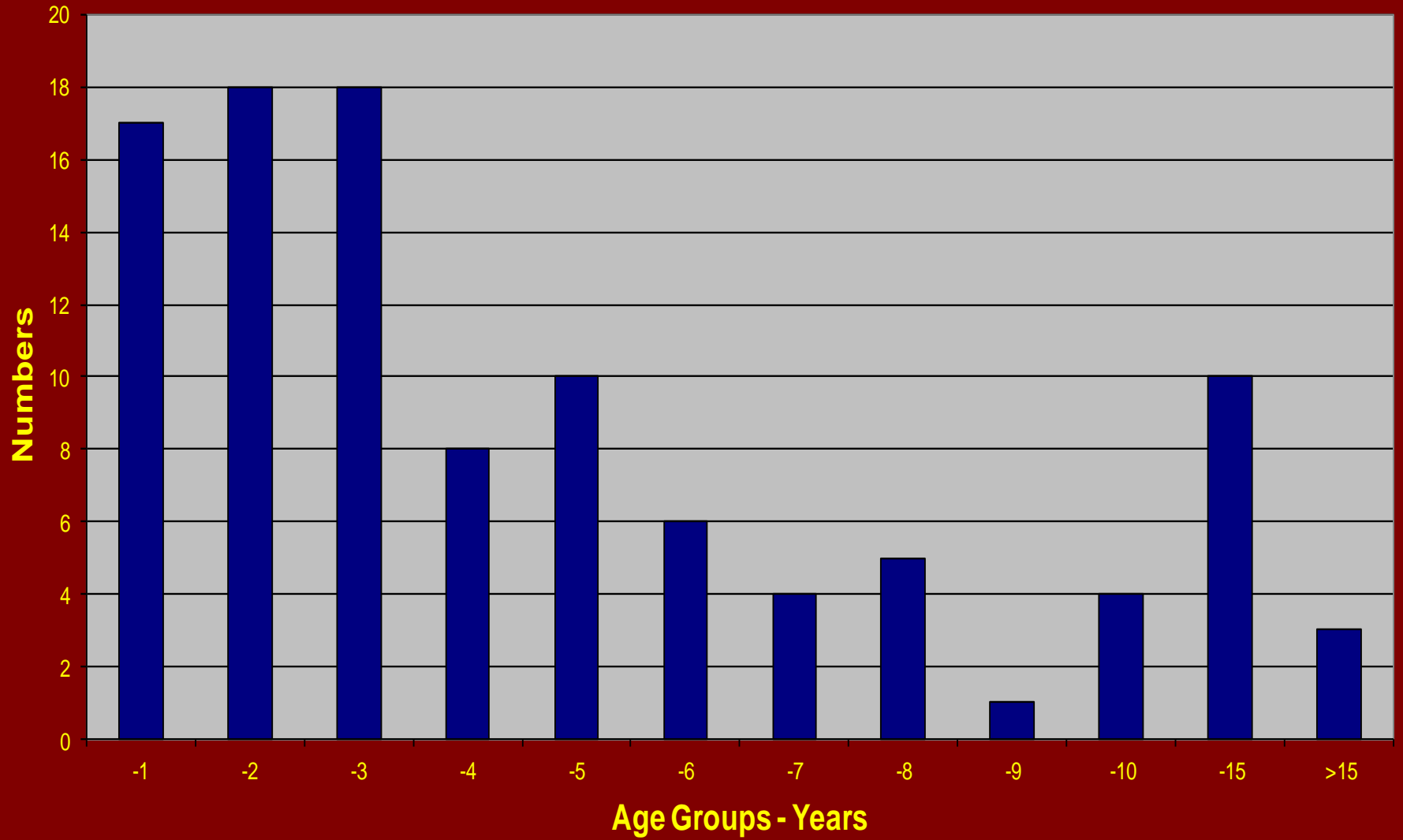


Paediatric Surgery: 2001 – 2012

Clinical contact	2047
Patients seen	494
Patients operated	446 (F = 24%)
Operations	682



Age at Operation



Surgical Advances - Urology

Herniotomy
Orchidopexy

Nephrostomy insertion
Lumbotomy nephrectomy

Hypospadias procedures
Female genitoplasty

Catheterless ureteric reimplantation
Neuropathic bladder Management
Ureterocystoplasty
COPUM





Paediatric Urology



Things to Remember

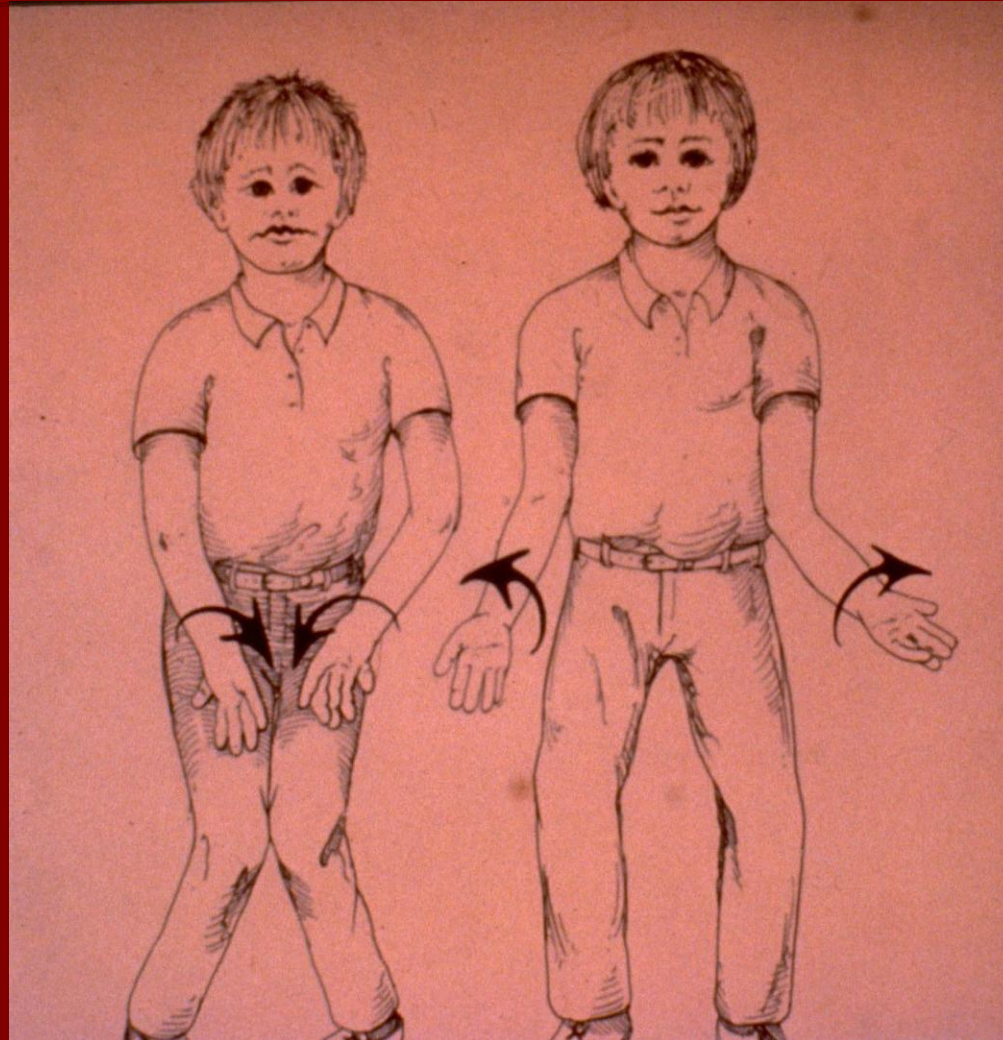
Manual testicular detorsion

Torted appendix testis



Inguinoscrotal Pathology

Manual Testicular Detorsion

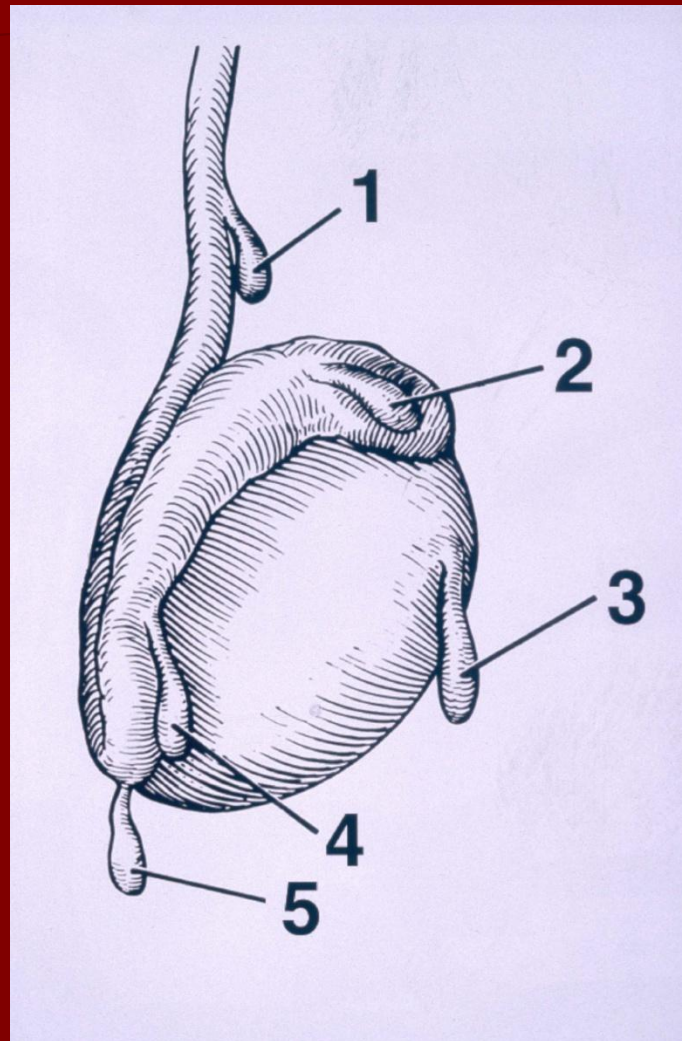




Inguinoscrotal Pathology



Torted Appendix Testis





Inguinoscrotal Pathology



Torted Appendix Testis





Inguinoscrotal Pathology



Torted Appendix Testis





Paediatric Urology



Things to Remember

Urine infection – *Examine the perineum*

Perineal Pathology

Perineal Anomalies





Perineal Pathology



Labial Adhesions



Manual Separation
or
Betnovate tds 6/52



Inguinoscrotal Pathology



Pathological Phimosis

Betnovate Ointment

Three times daily 6/52

To partly retracted foreskin

then

Physiotherapy





Paediatric Urology



Things to Remember

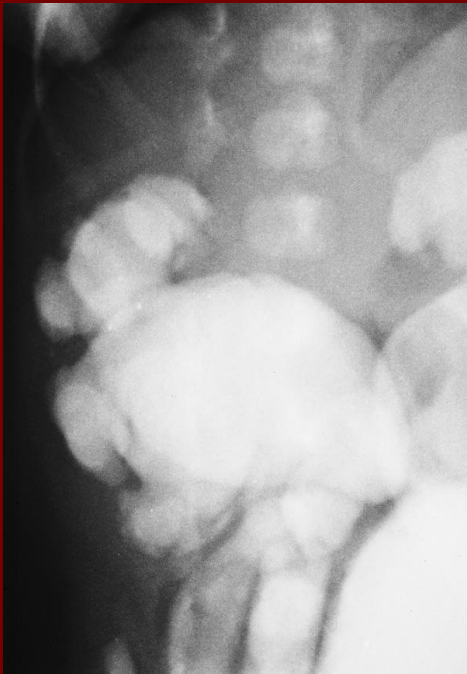
Urine infection

*Could be Vesicoureteric Reflux
or
Obstruction*



Catheterless Ureteric Reimplantation

Vesicoureteric Reflux



IV or V



Wide Ureter

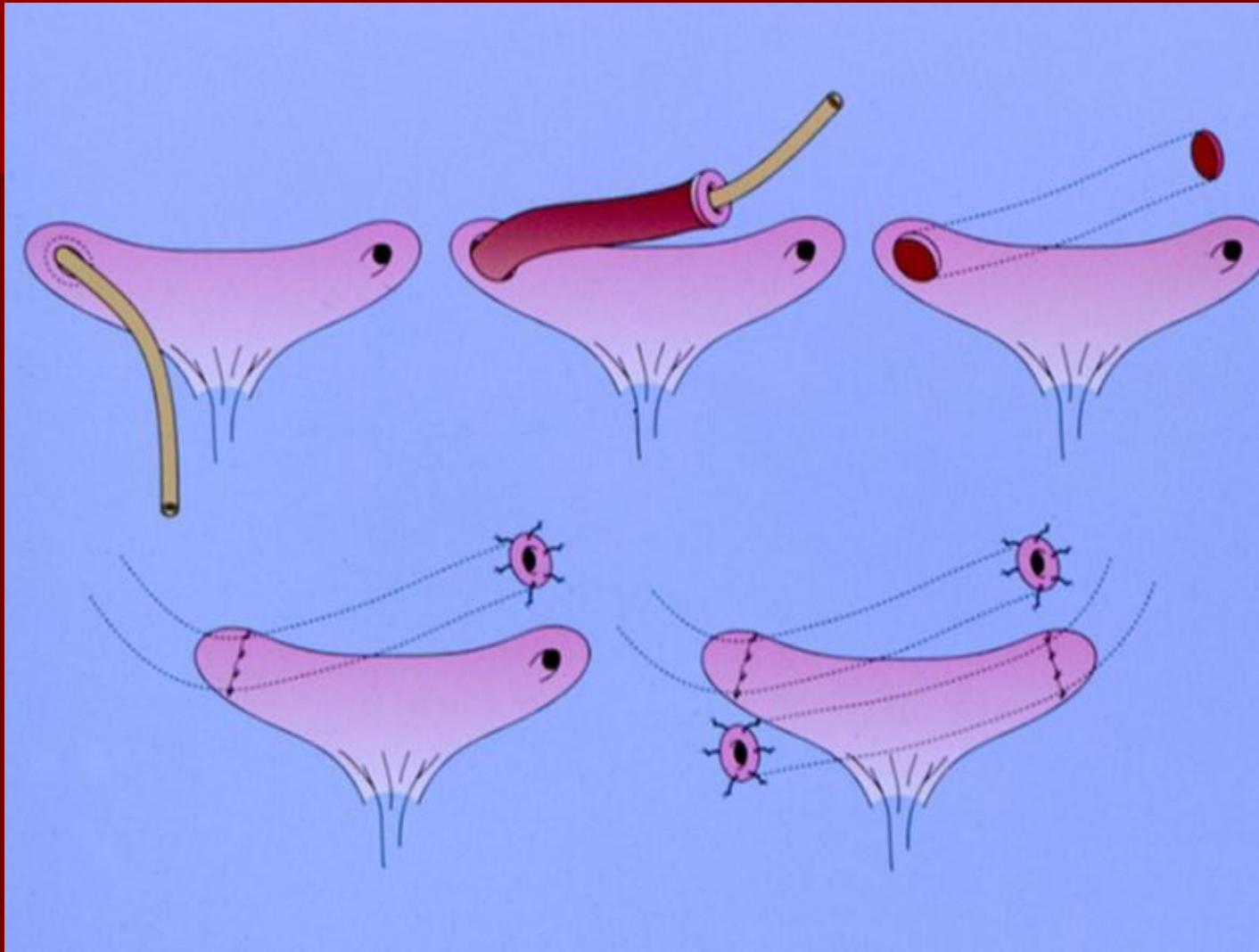


**Short
Tunnel**

When to Operate?



Catheterless Ureteric Reimplantation



Which Operation?



Ureteric Reimplantation - Melbourne





Catheterless Ureteric Reimplantation

Melbourne 2000-2005

Post-op Days	Patient #'s
0	17 (10%)
1	137 (82%)
2	12 (7%)
4	1 (<1%)

Catheterless Ureteric Reimplantation



Mauritius - 11



Things to Remember

Tricks for Testicle
and
Hernia examination



Inguinoscrotal Pathology

UDT's - Examination

Warm hands and patient

Phallus and scrotal appearance

Bimanual palpation for testicle
= milking toward the scrotum



Inguinoscrotal Pathology

UDT's - Examination

Apply abdominal pressure

Patient standing and squatting

Testicular size/compensatory hypertrophy



Inguinoscrotal Pathology

Undescended Testicles



Non Descended



Lateral Ectopic



Inguinoscrotal Pathology

UDT's - Investigation

Usually none

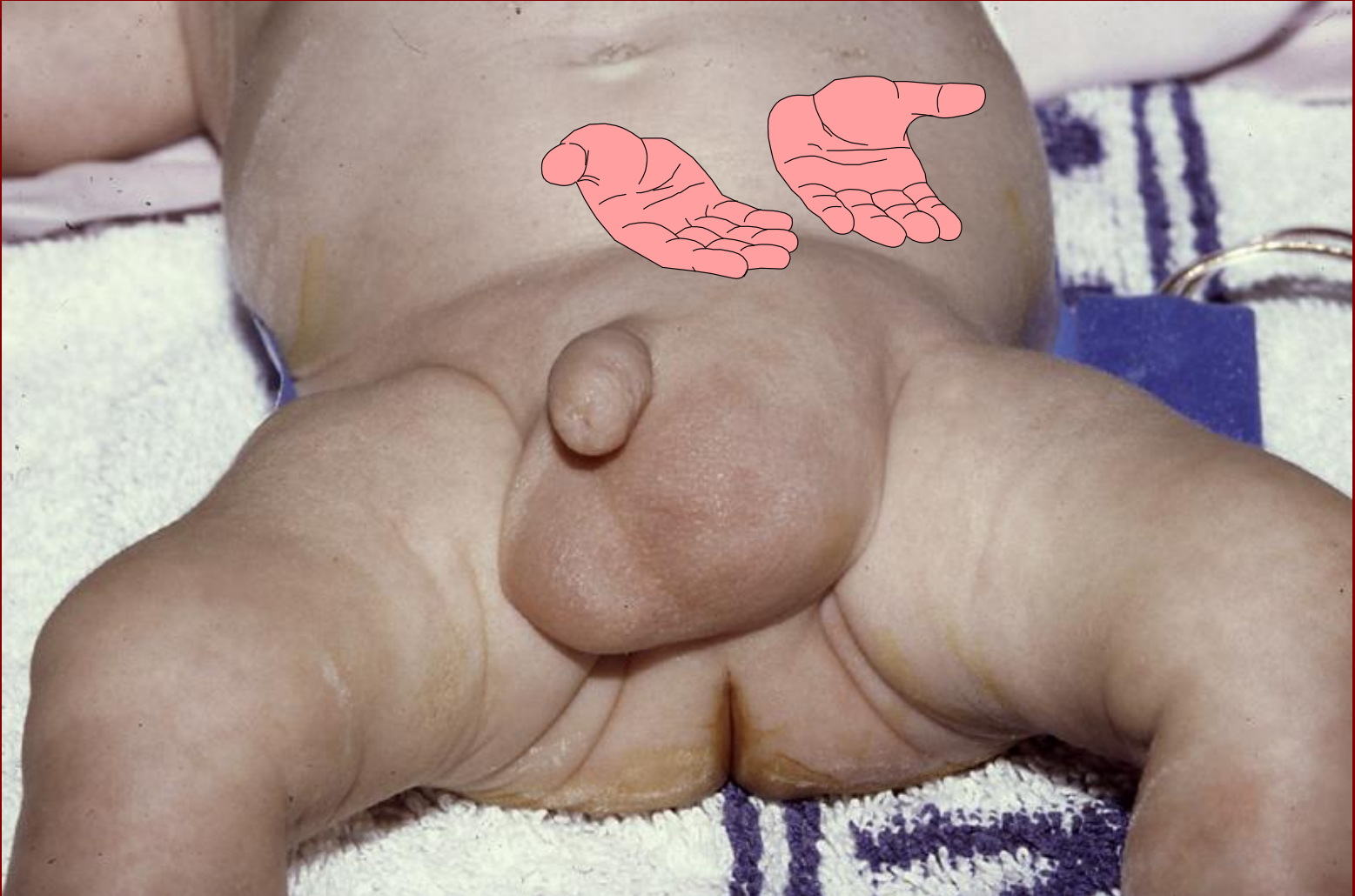
Ultrasound often misleading

Laparoscopy for impalpable testicle



Inguinoscrotal Pathology

Inguinal Hernia





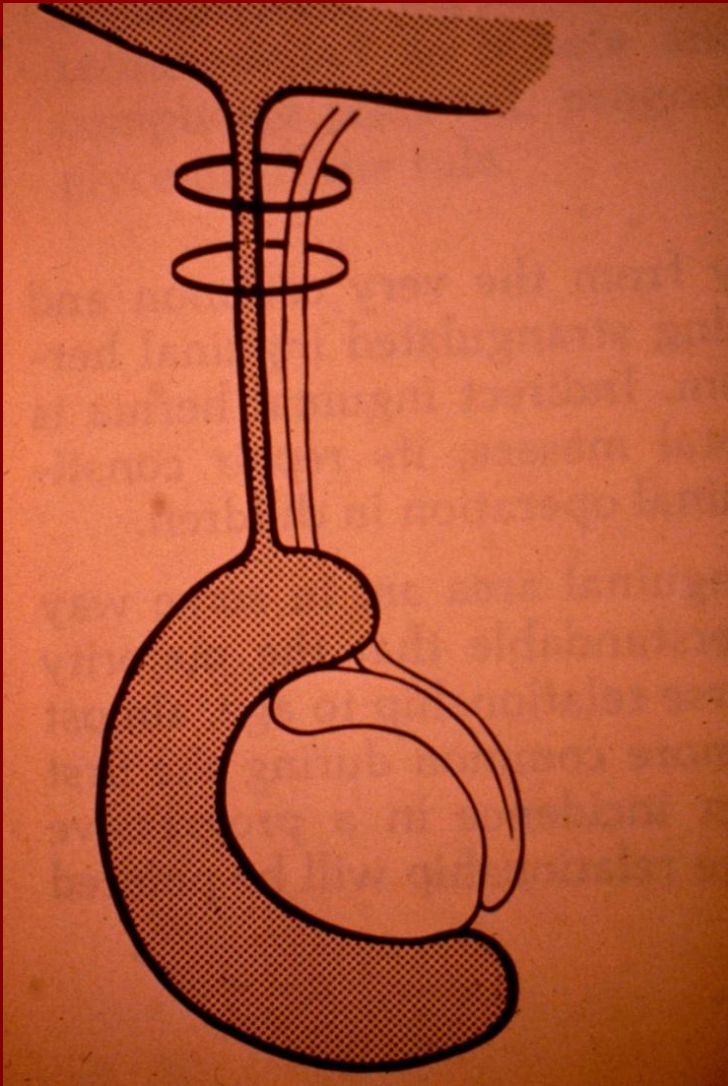
Things to Remember

When to operate on
Hydroceles in children



Inguinoscrotal Pathology

Hydrocele



Communicating Hydrocele



Surgical Advances - Urology

Herniotomy
Orchidopexy

Nephrostomy insertion
Lumbotomy nephrectomy

Hypospadias procedures
Female genitoplasty

Catheterless ureteric reimplantation
Neuropathic bladder Management
Ureterocystoplasty
COPUM



Mauritian Lesions - Orchidopexy



12 - Orchidopexies
12 - Redo Orchidopexies
15 - Fowler-Stephens

Surgical Advances - Urology

Herniotomy
Orchidopexy

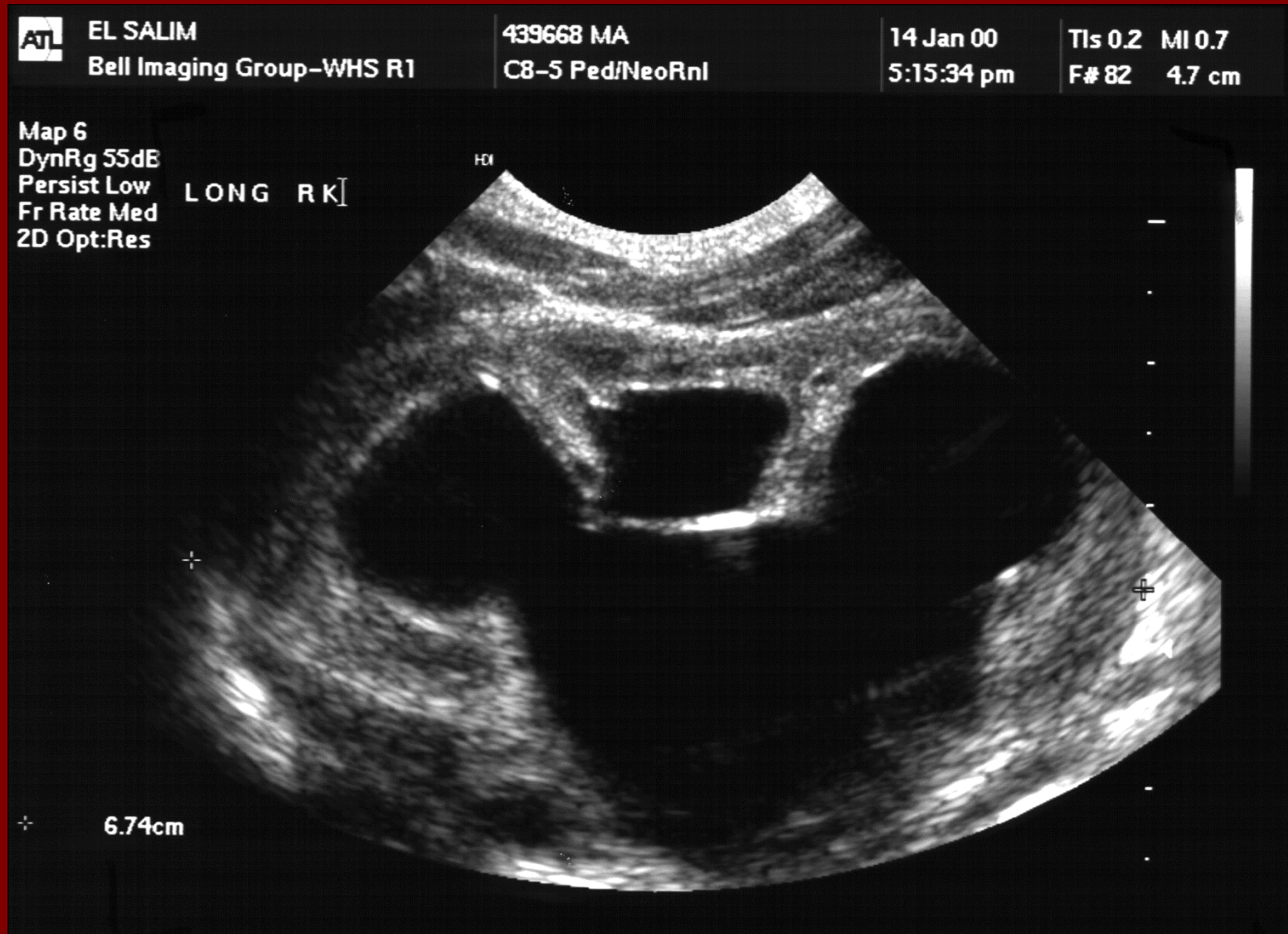
Nephrostomy insertion
Lumbotomy nephrectomy

Hypospadias procedures
Female genitoplasty

Catheterless ureteric reimplantation
Neuropathic bladder Management
Ureterocystoplasty
COPUM



Nephrostomy in Children



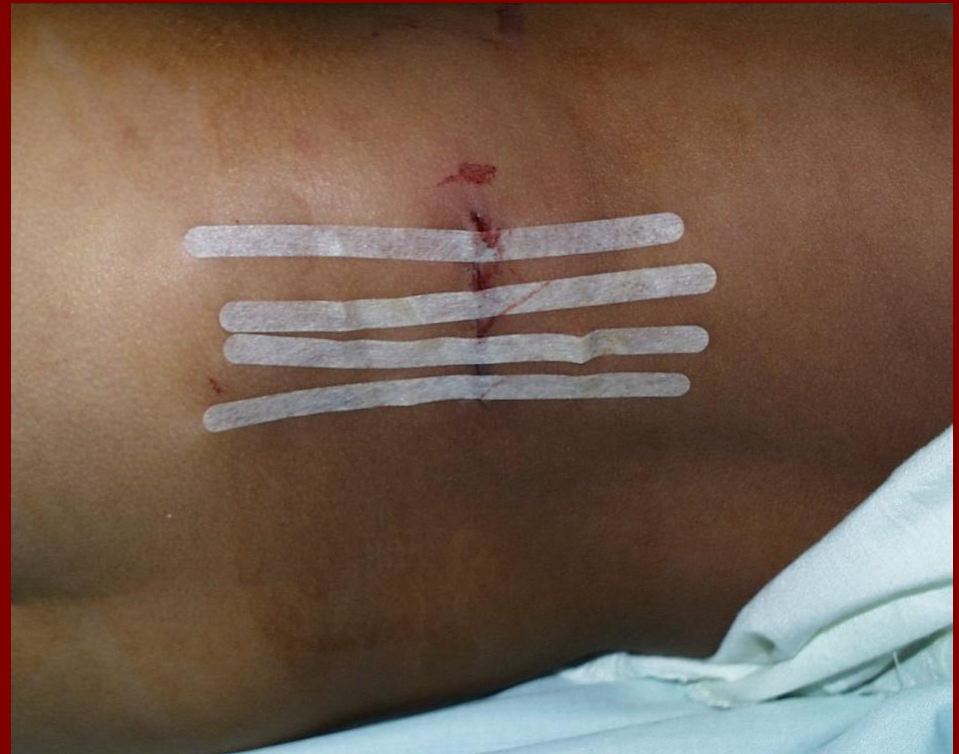
Nephrostomy in Children



Nephrostomy in Children



Lumbotomy Nephrectomy



Surgical Advances - Urology

Herniotomy
Orchidopexy

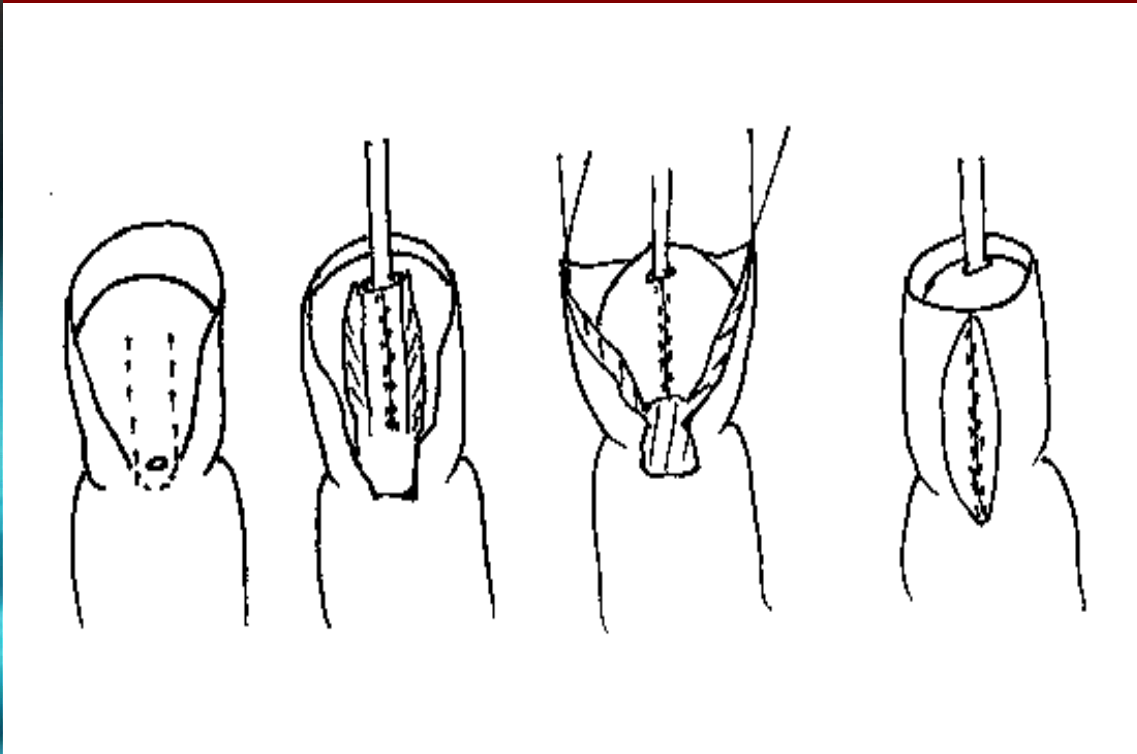
Nephrostomy insertion
Lumbotomy nephrectomy

Hypospadias procedures
Female genitoplasty

Catheterless ureteric reimplantation
Neuropathic bladder Management
Ureterocystoplasty
COPUM



Surgical Advances – Foreskin Reconstruction



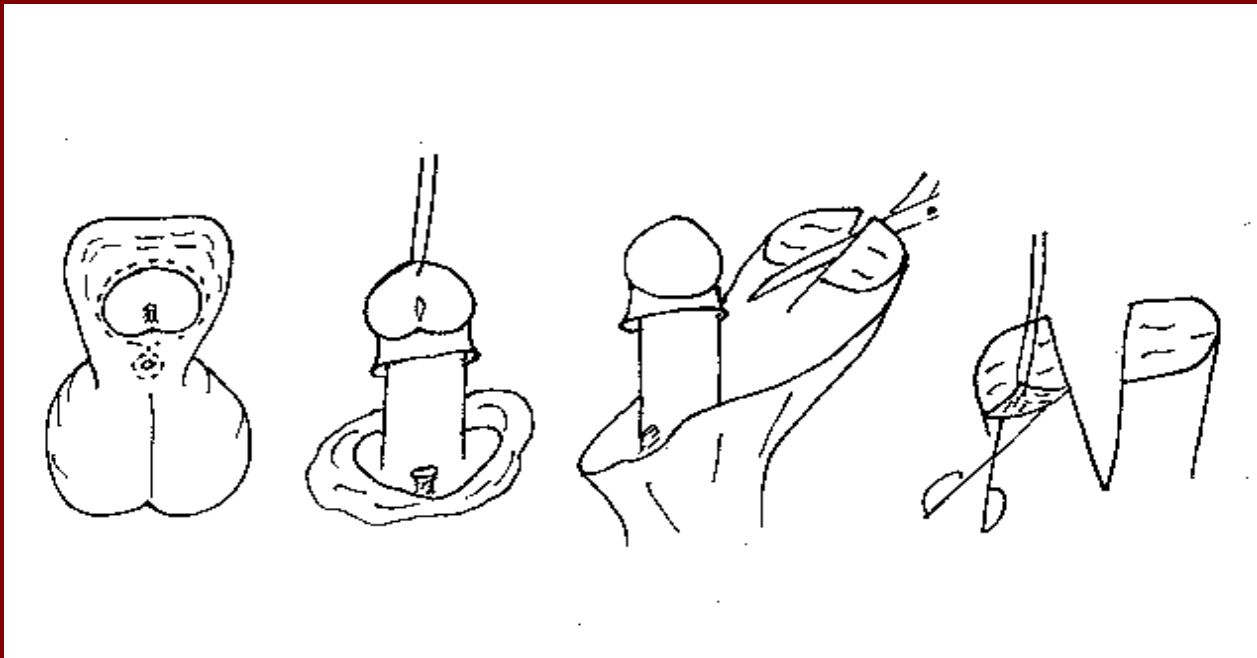
Surgical Advances – Male Genitoplasty



135 Mauritian Operations

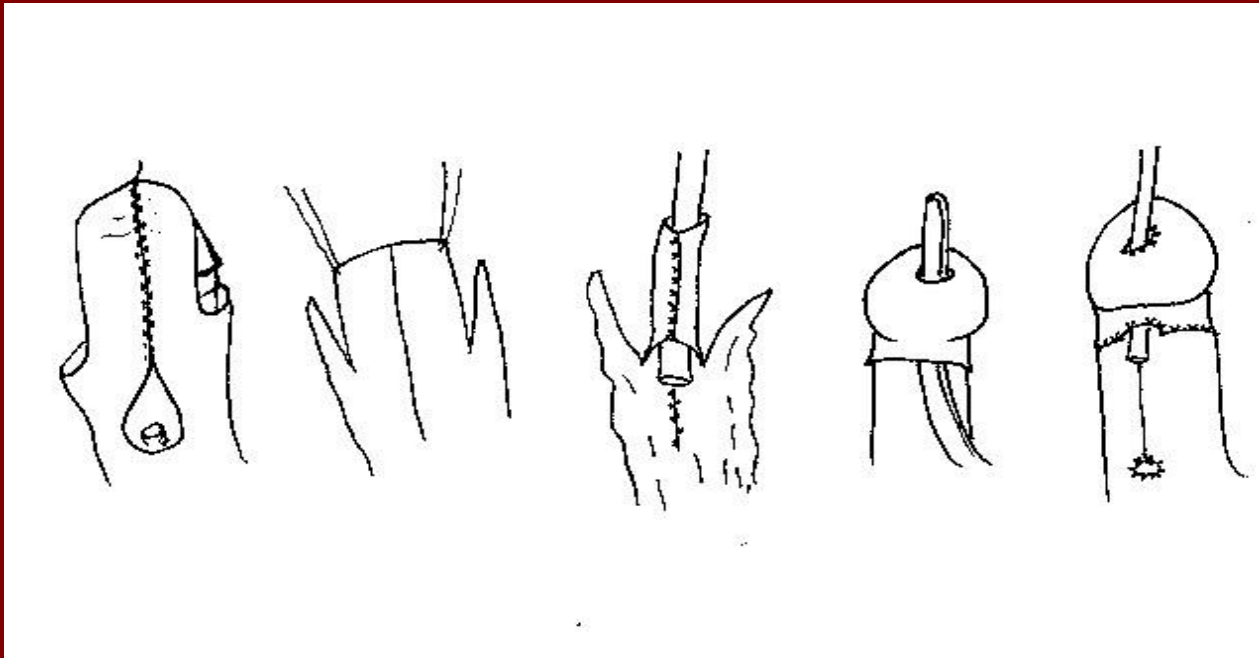
Ulaanbataar – Hypospadias repair

Surgical Procedure (UB I):



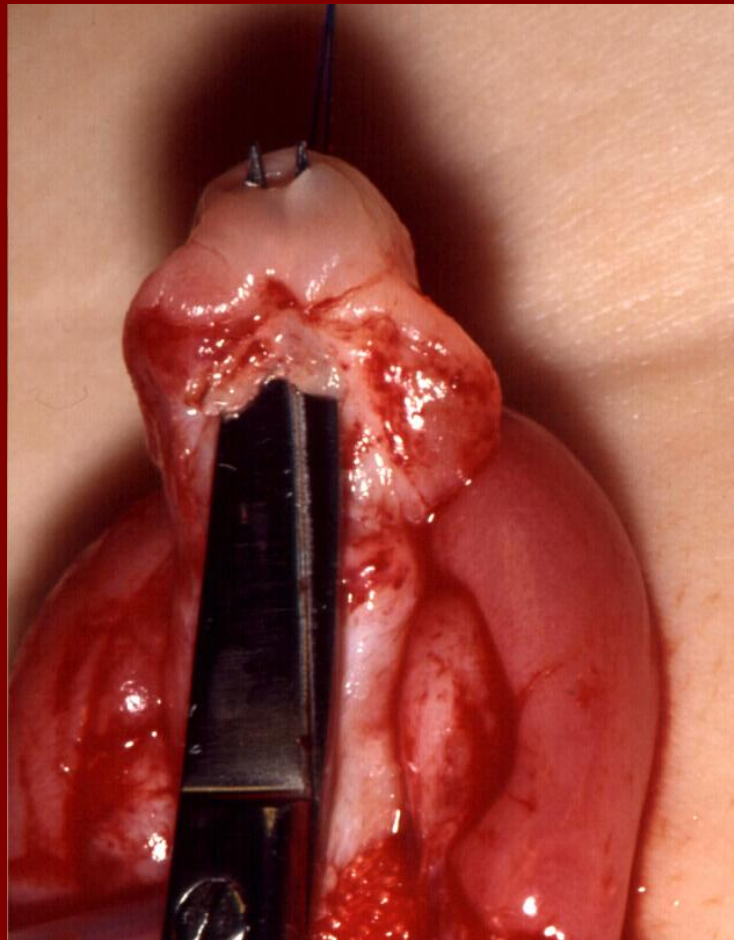
Ulaanbataar – Hypospadias repair

Surgical Procedure (UB I):



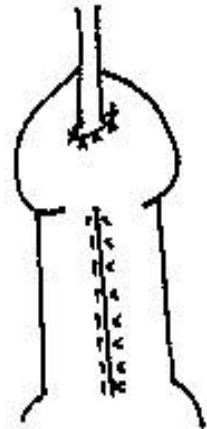
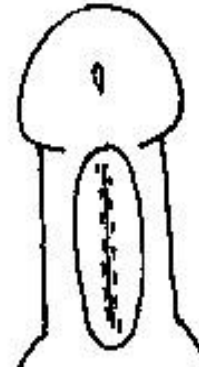
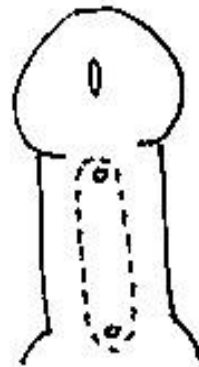
Ulaanbataar – Hypospadias repair

Surgical Procedure (UB I):



Ulaanbataar – Hypospadias repair

Surgical Procedure (UB II):



Ulaanbataar – Hypospadias repair



UB II

or

UB III



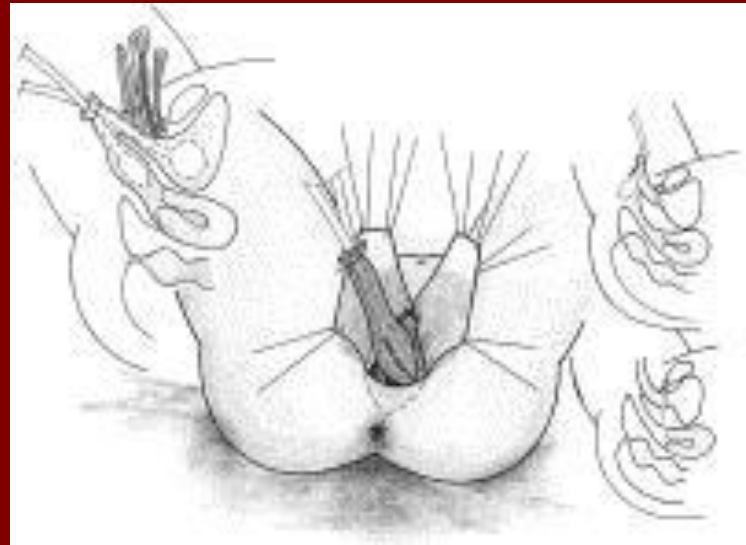
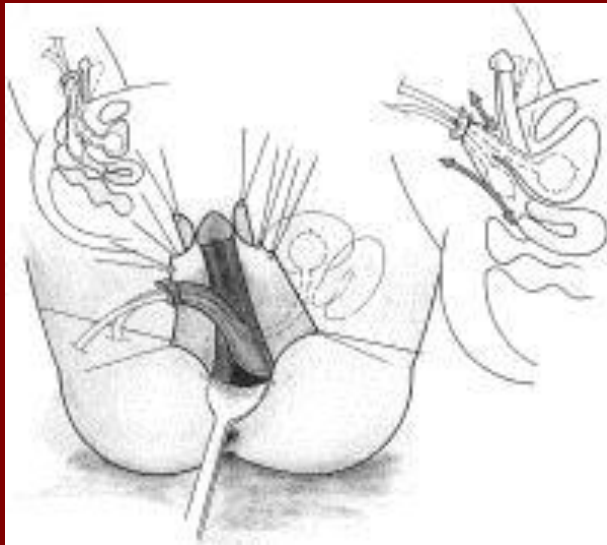
Surgical Advances – Female Genitoplasty

Late Presentation



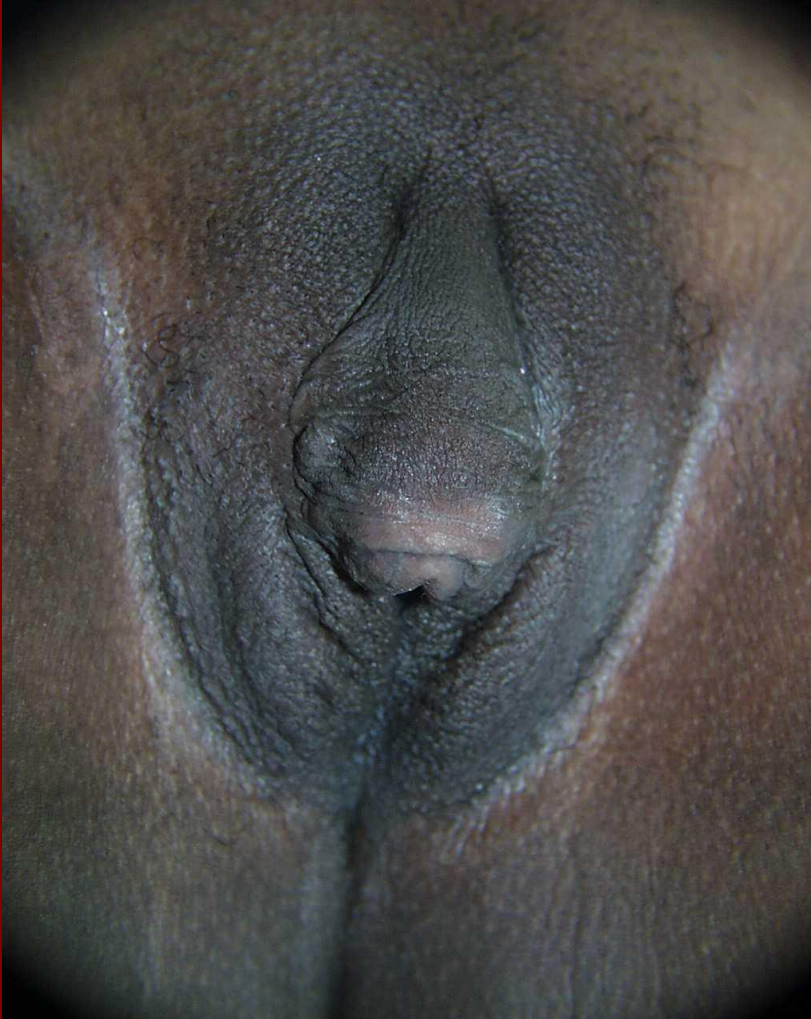
Surgical Advances – Female Genitoplasty

Passerini-Glazel Technique

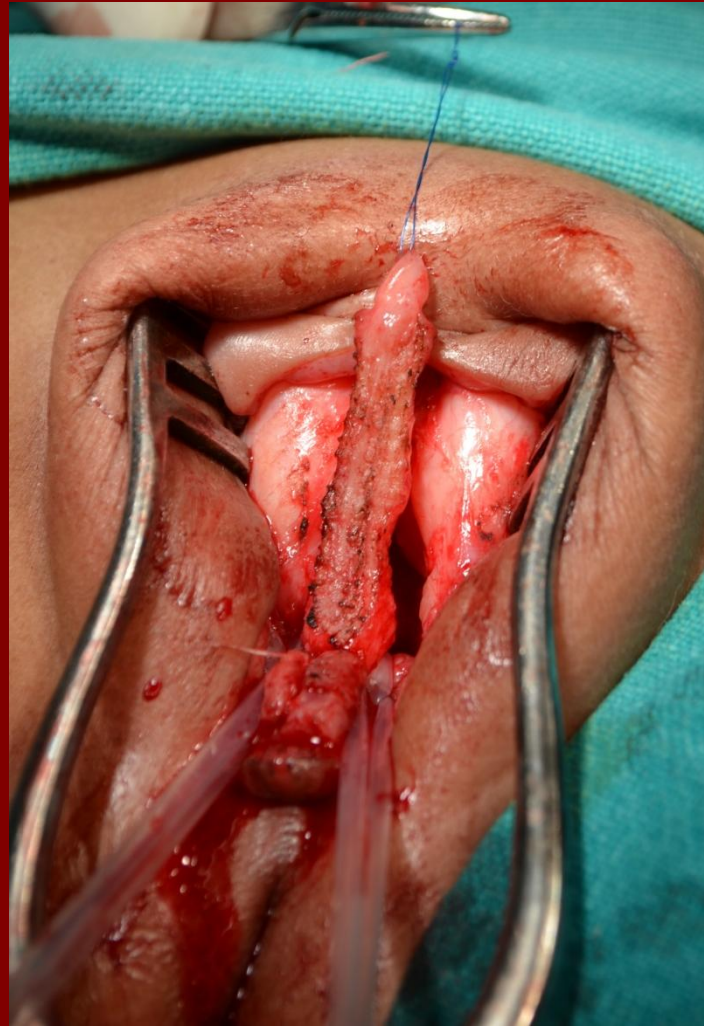


Passerini-Glazel G. A new 1-stage procedure for clitorovaginoplasty in severely masculinized female pseudhermaphrodites.
J Urol 1989; 142:565

Surgical Advances – Female Genitoplasty



Surgical Advances – Female Genitoplasty



Surgical Advances – Female Genitoplasty



Surgical Advances - Urology

Herniotomy
Orchidopexy

Nephrostomy insertion
Lumbotomy nephrectomy

Hypospadias procedures
Female genitoplasty

Catheterless ureteric reimplantation
Neuropathic bladder Management
Ureterocystoplasty
COPUM



Catheterless Ureteric Reimplantation

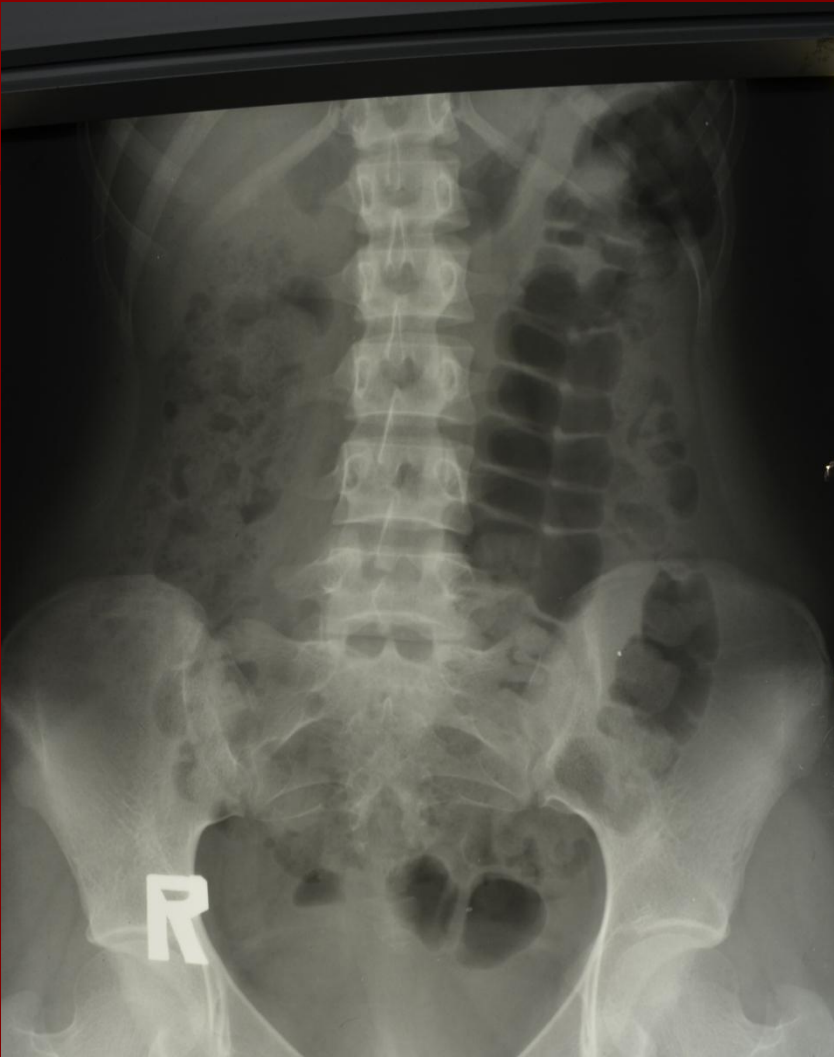


Vaginal ectopic,
duplex ureter





Surgical Advances – Neuropathic bladder



Renal Ix

Cystoscopy/Urodynamics

Oxybutinin

Intermittent catheterisation

Bladder augmentation





Surgical Advances – Neuropathic bladder



Renal Ix

Cystoscopy/Urodynamics

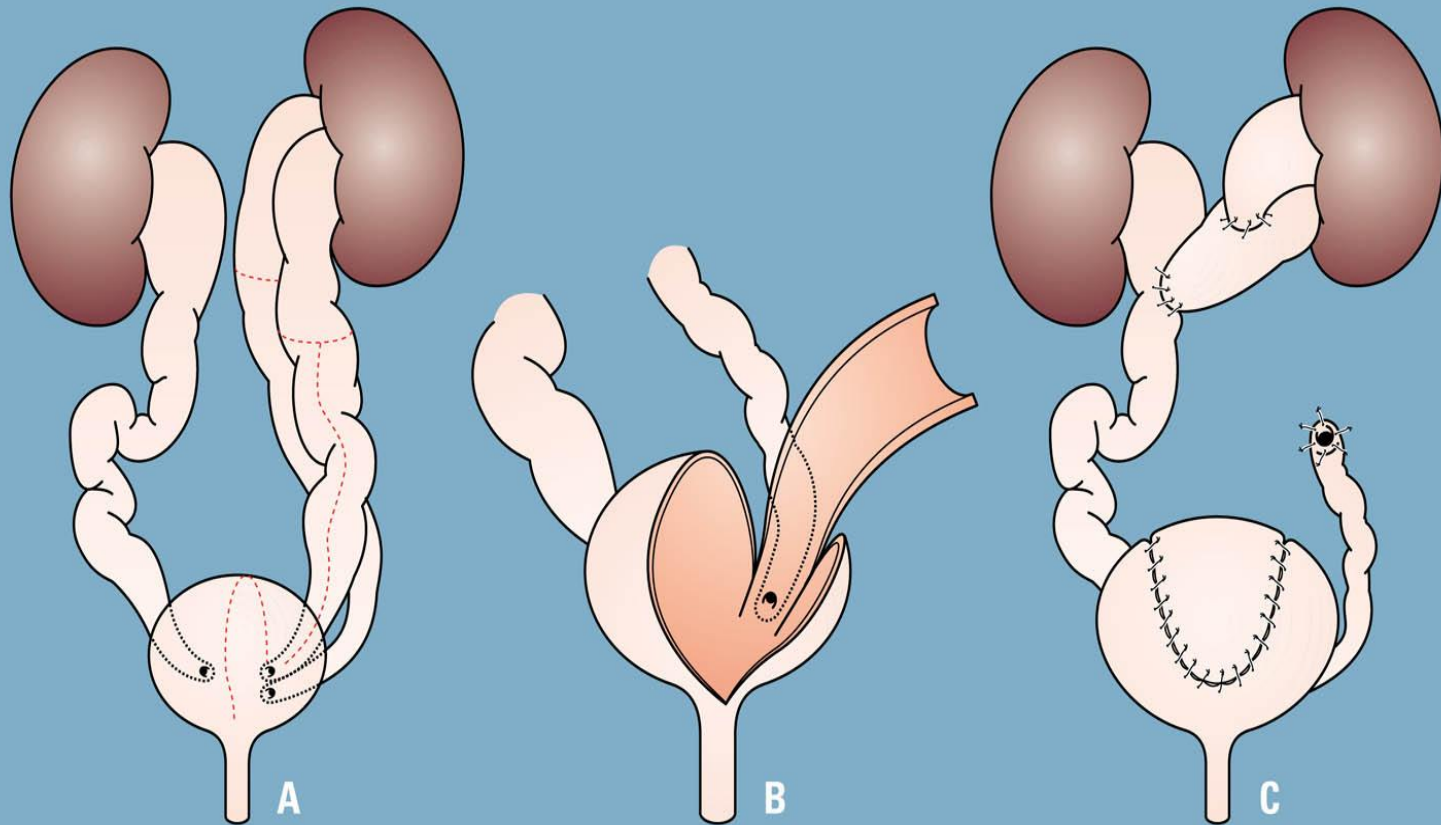
Oxybutinin

Intermittent catheterisation

Bladder augmentation

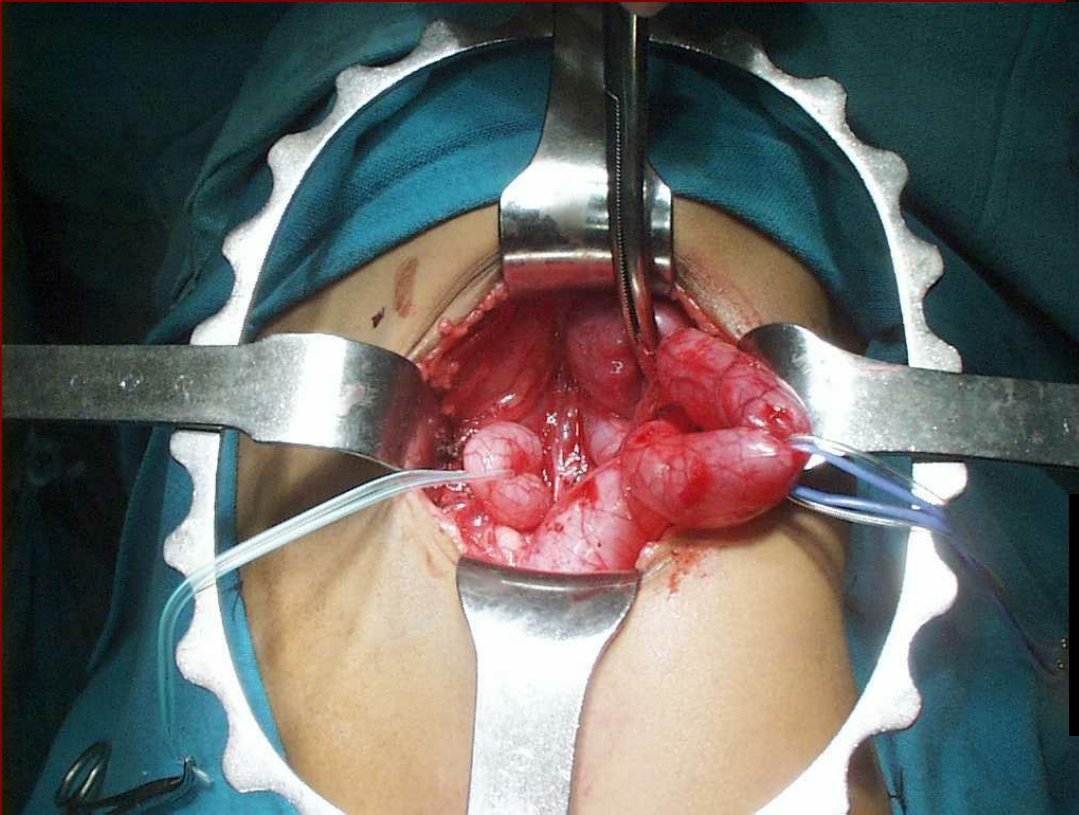


Surgical Advances – Ureterocystoplasty

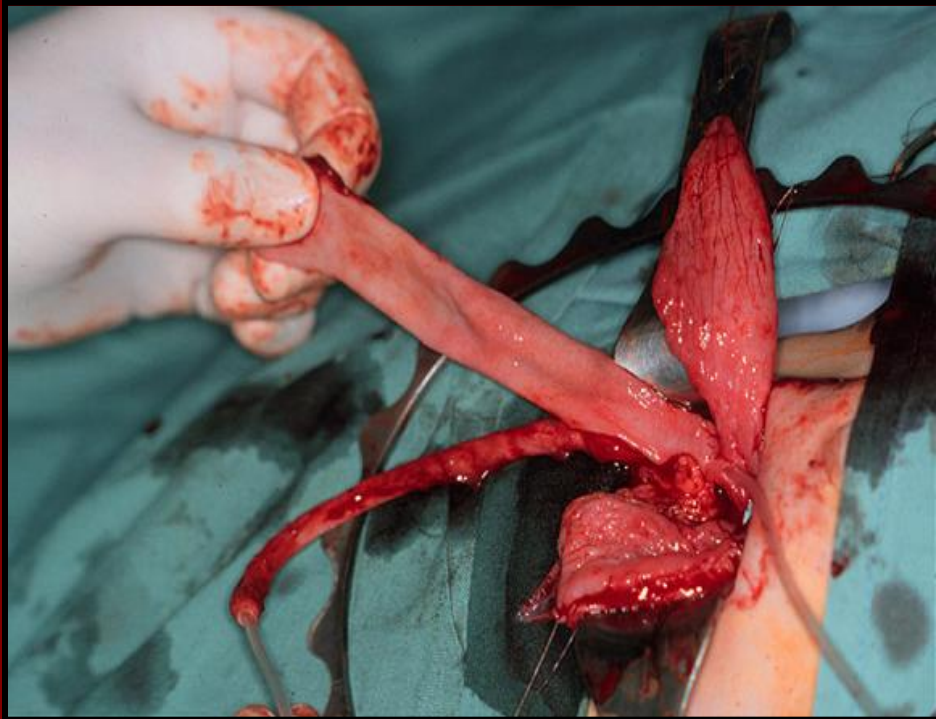


Seven Mauritian cases

Surgical Advances – Ureterocystoplasty

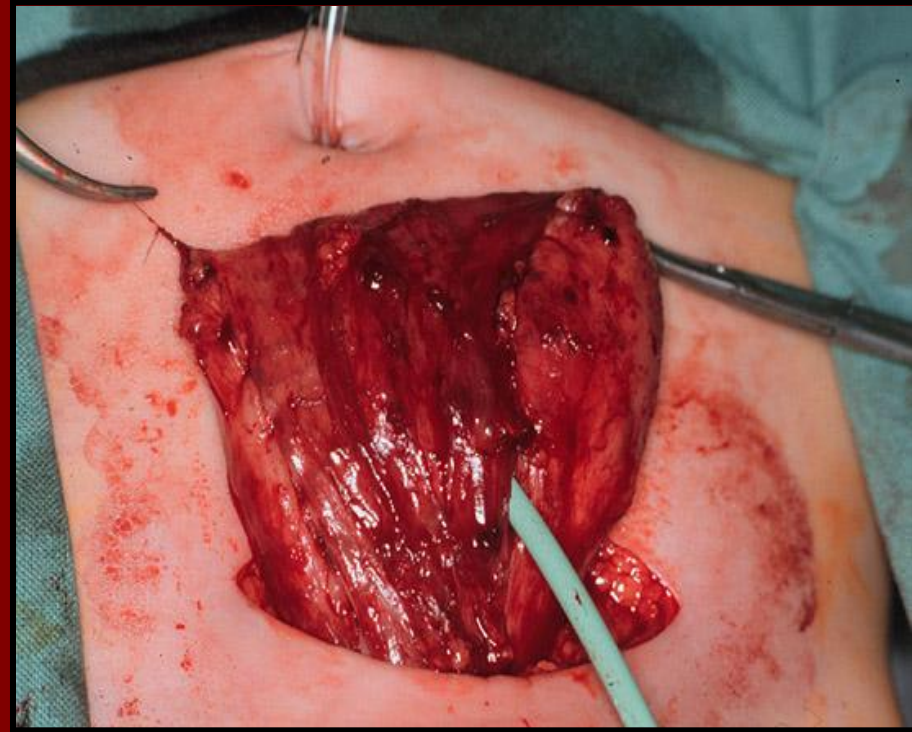


Surgical Advances – Ureterocystoplasty



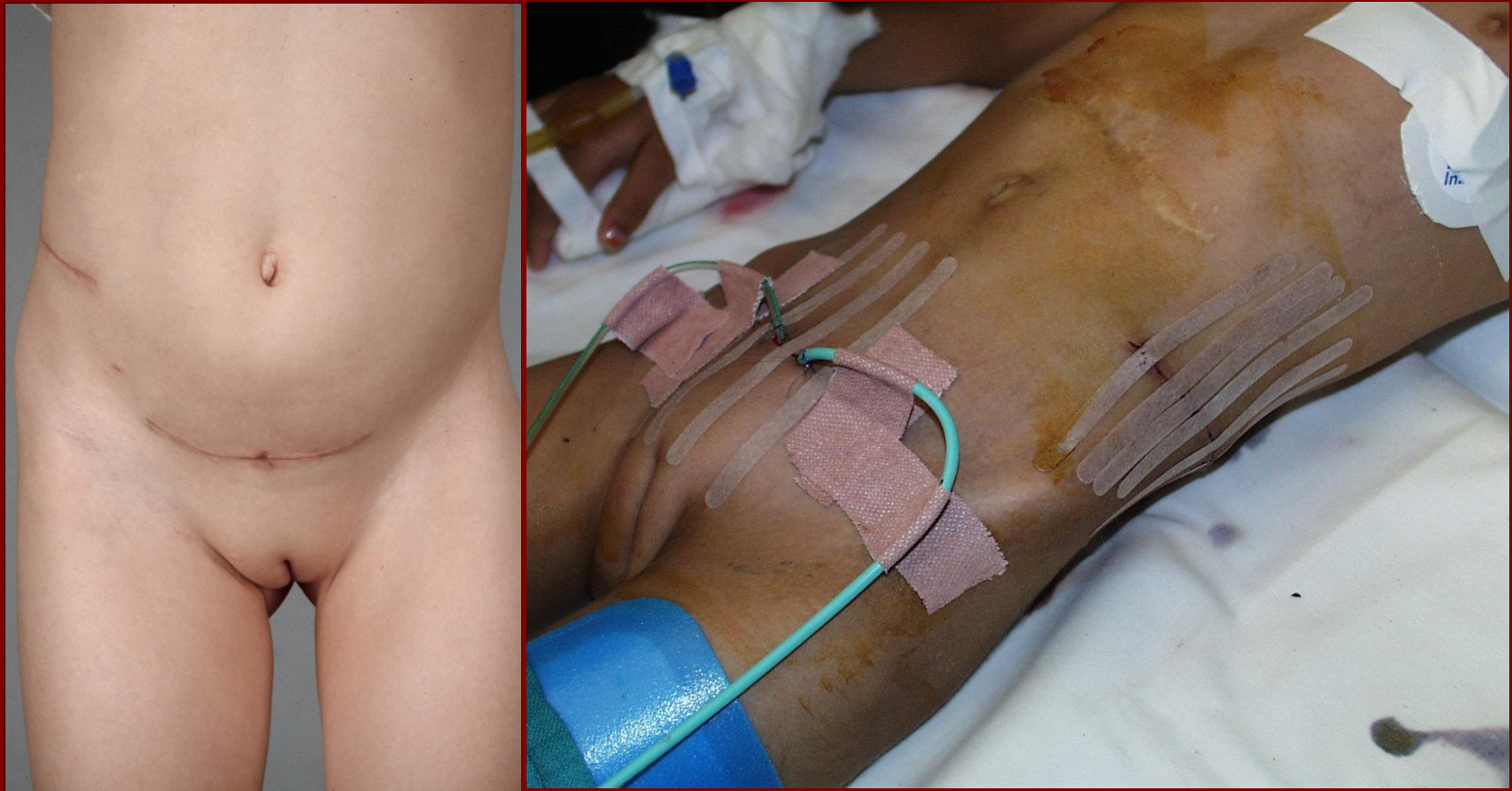
Bivalved Bladder

Augmented Bladder



Surgical Advances – Ureterocystoplasty

“Cosmetic” outcome



Surgical Advances - Urology

Herniotomy
Orchidopexy

Nephrostomy insertion
Lumbotomy nephrectomy

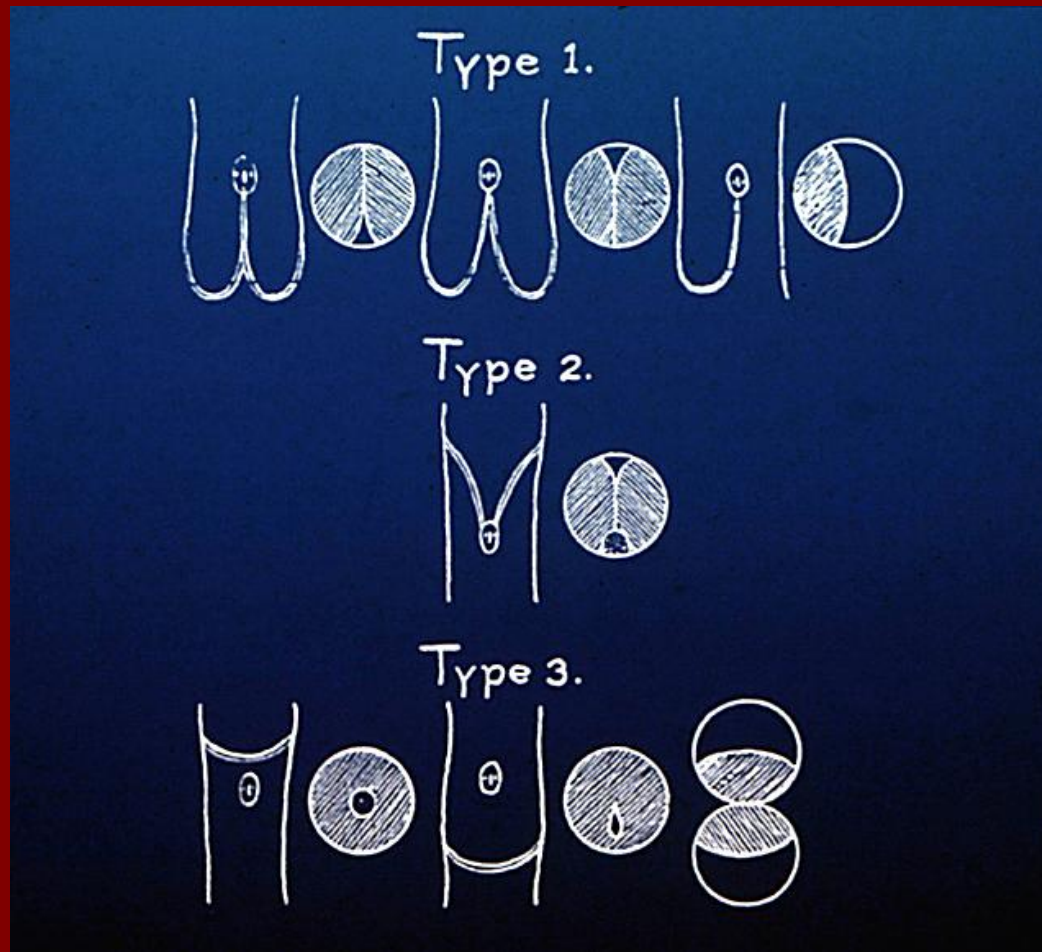
Hypospadias procedures
Female genitoplasty

Catheterless ureteric reimplantation
Neuropathic bladder Management
Ureterocystoplasty
COPUM



Surgical Advances – COPUM

Young's classification (1919)



Surgical Advances – COPUM

COPUM Catheter Splitting

Type III

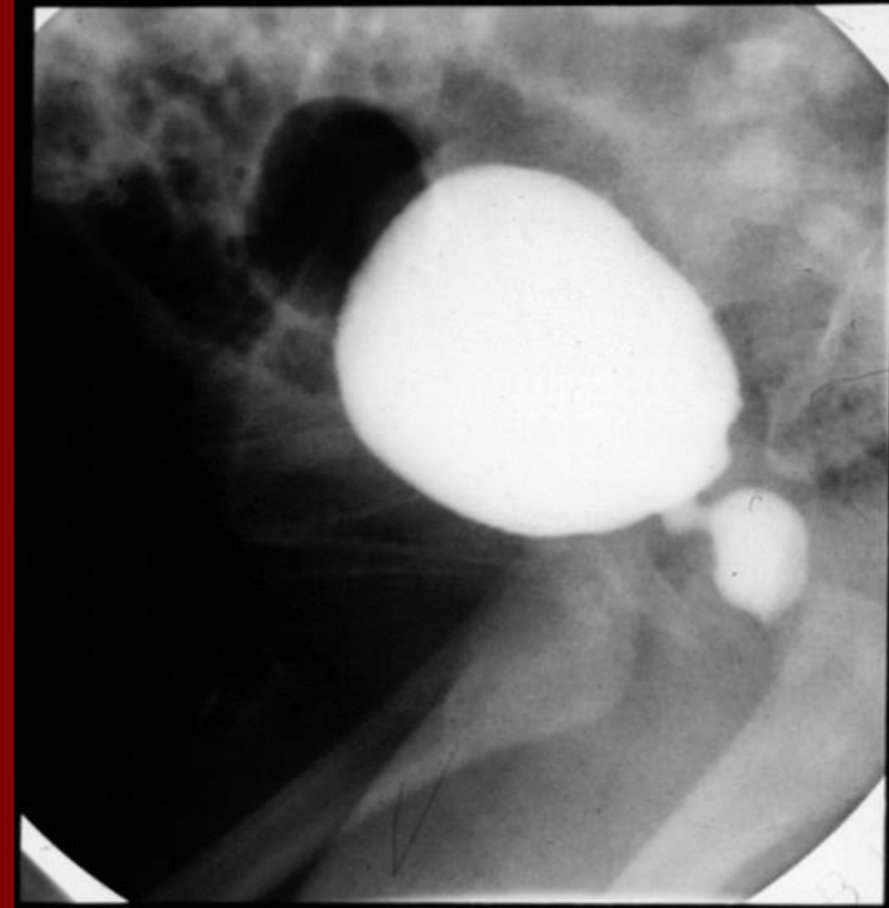
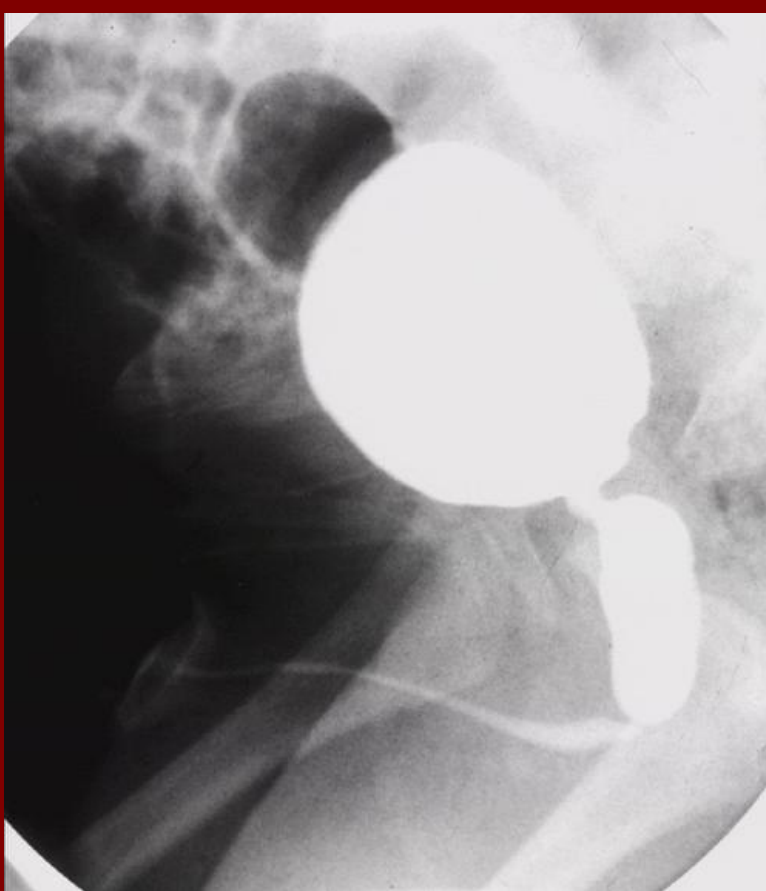


Type I



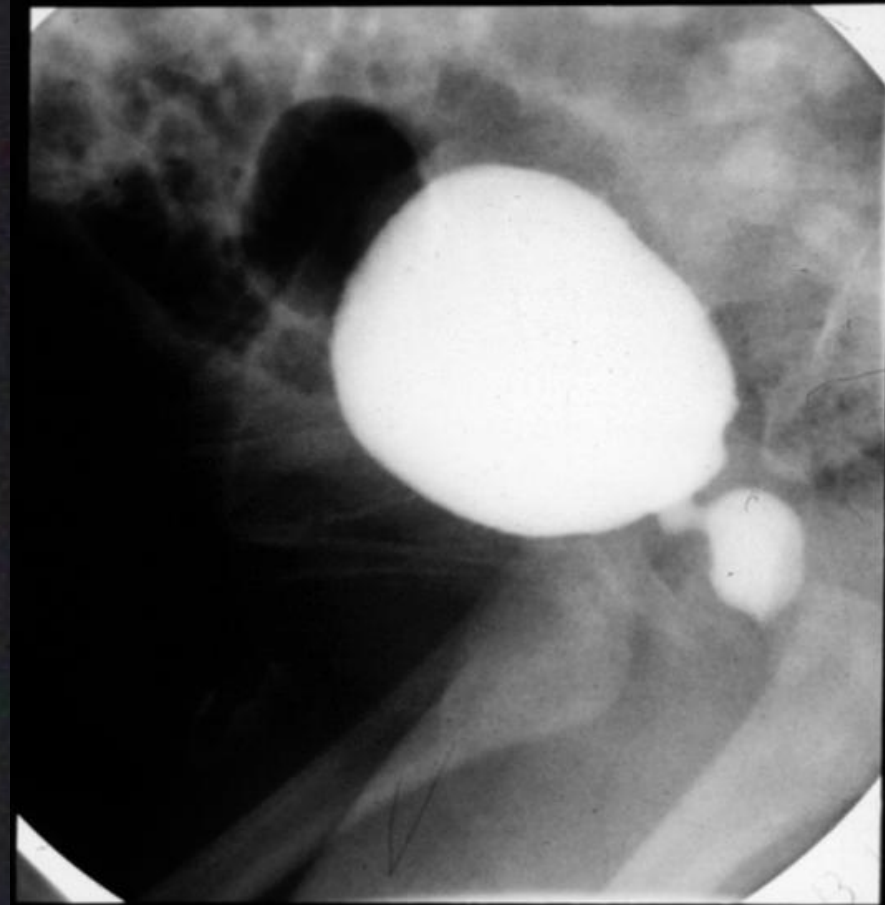
Surgical Advances – COPUM

Radiological Sphincter Anatomy



Surgical Advances – COPUM

Endoscopic and Radiologic Sphincter Anatomy



Surgical Advances – COPUM

Congenital Obstructive Posterior Urethral Membrane



86 - Operations

11 - Fulgurations

5 - Vesicostomy

Surgical Advances - General

Cloacal repair

Single stage Pena

Perineoplasty

Hirschsprung's

Megarectum

Colostomy prolapse management

Lienorenal shunt

Oesophageal stricture

Neonatal Surgery



Surgical Advances - General

Cloacal repair

Single stage Pena

Perineoplasty

Hirschsprung's

Megarectum

Colostomy prolapse management

Lienorenal shunt

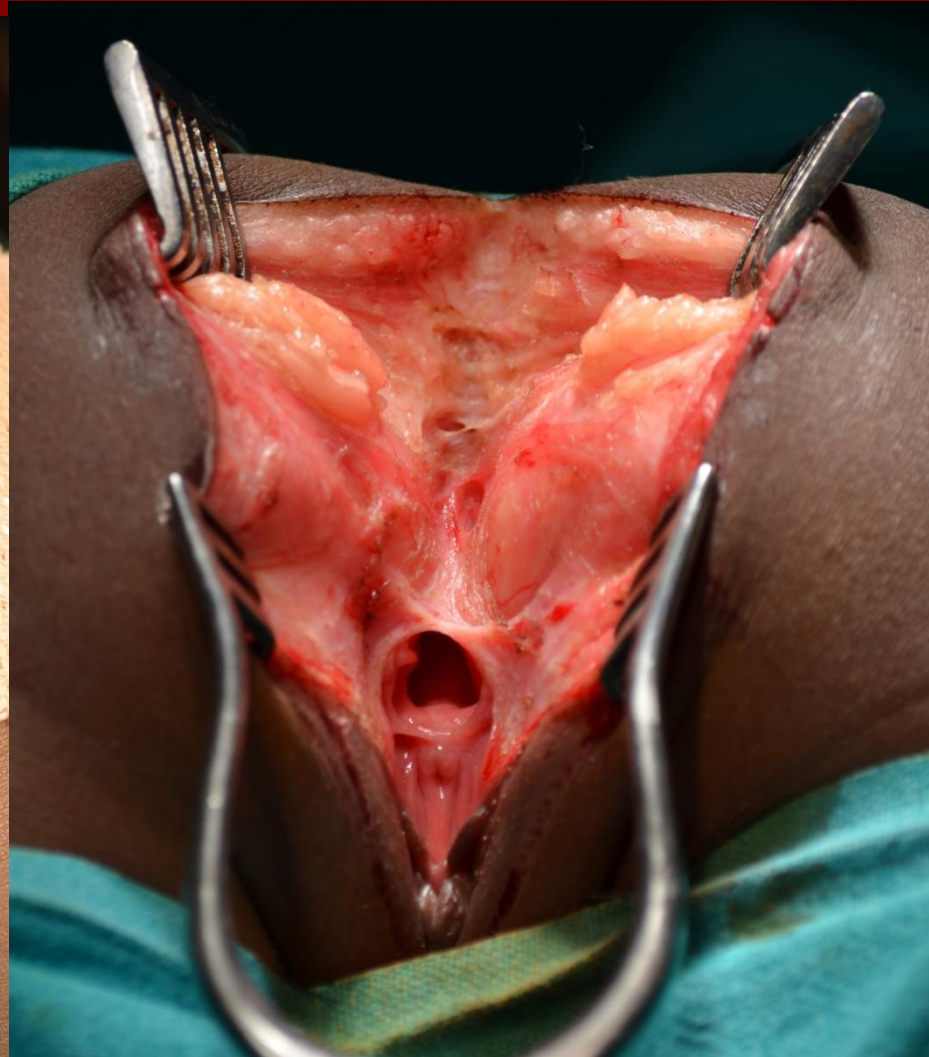
Oesophageal stricture

Neonatal Surgery



Surgical Advances - General

Cloacal repair



Surgical Advances - General

Cloacal repair - Six



Surgical Advances - General

Cloacal repair



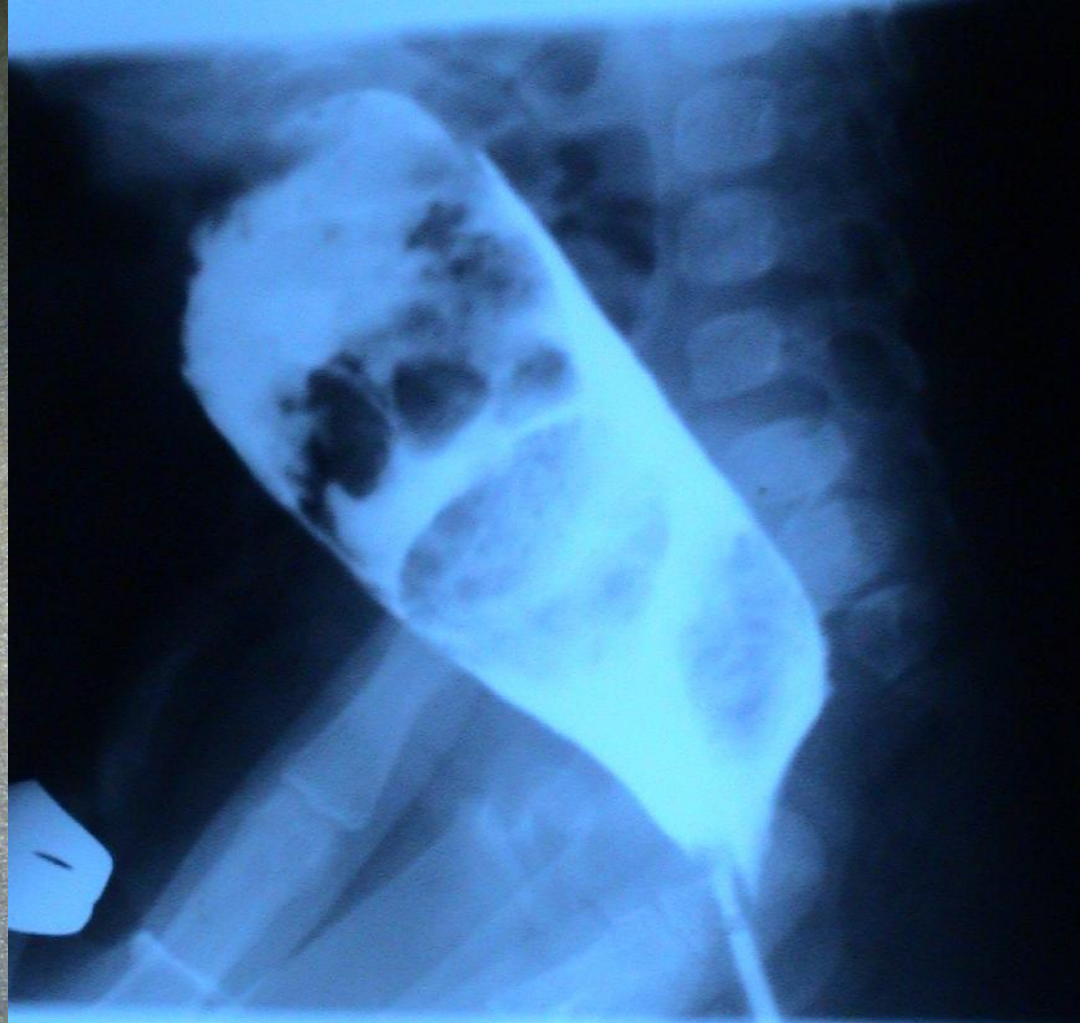
Surgical Advances - General

Single Stage Pena



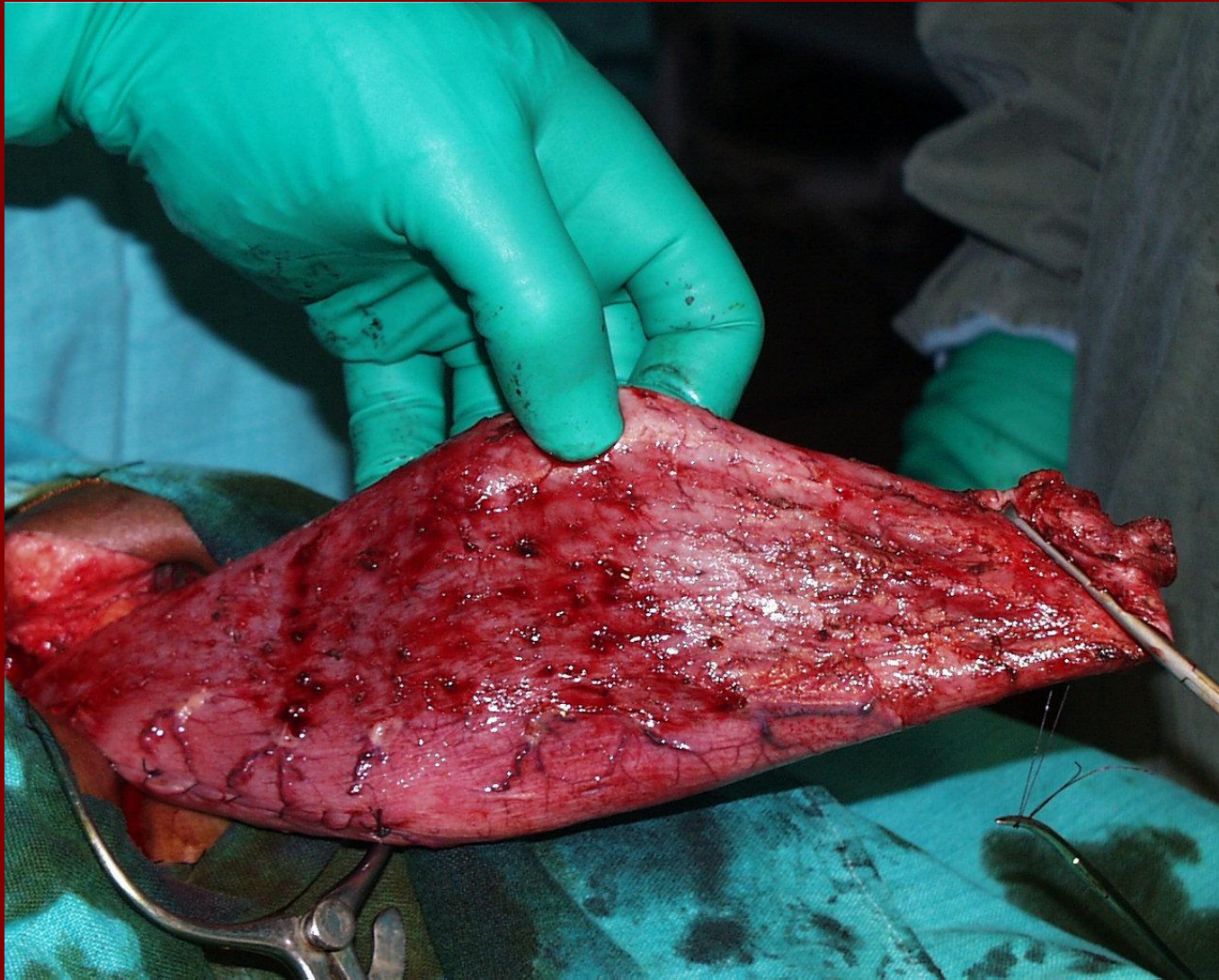
Surgical Advances - General

Single Stage Pena



Surgical Advances - General

Single Stage Pena



Surgical Advances – Single Stage Pena

No colostomy + minimal incision



Surgical Advances - Perinoplasty



Perineal trauma management

Surgical Advances - Perinoplasty



Imperforate anus management

Surgical Advances - General

Cloacal repair

Single stage Pena

Perineoplasty

Hirschsprung's

Megarectum

Colostomy prolapse management

Lienorenal shunt

Oesophageal stricture

Neonatal Surgery



Surgical Advances - General

Megarectum



Surgical Advances - General

Megarectum

Exam : The biopsy contains a tiny piece of transitional ~~and~~ mucosa at the anorectal junction. The surface epithelium is eroded from the ulcer associated with some oedema of the underlying mucosa. The muscularis mucosa is thickened and expanded by diffuse oedema and patchy "traumatic" prolapse of the mucosa. Multiple levels examined show complete ulceration in this patch of mucosa.

The latter finding is in keeping with the ultrashort segment type of Hirschsprung's disease.

Report : 06-DEC-2011

Sig :



Surgical Advances - General

Hirschsprung's



Surgical Advances - General

Hirschsprung's – Late presentation



Surgical Advances - General

Hirschsprung's – Late presentation



Surgical Advances - General

Hirschsprung's – Clinical Dx of level



Surgical Advances - General

Hirschsprung's – Clinical Dx of level



Surgical Advances - General

Hirschsprung's – Single Stage Procedure



Surgical Advances - General

Hirschsprung's – Rectal RUQ stomas!



Surgical Advances - General

Colostomy Revision



Surgical Advances - General

Cloacal repair

Single stage Pena

Perineoplasty

Hirschsprung's

Megarectum

Colostomy prolapse management

Lienorenal shunt

Oesophageal stricture

Neonatal Surgery



Surgical Advances - Neonates



Diaphragmatic Hernia



Duodenal Duplication

Surgical Advances - Urology

Herniotomy
Orchidopexy

Nephrostomy insertion
Lumbotomy nephrectomy

Hypospadias procedures
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Ureterocystoplasty
COPUM



Surgical Advances - General

Cloacal repair

Single stage Pena

Perineoplasty

Hirschsprung's

Megarectum

Colostomy prolapse management

Lienorenal shunt

Oesophageal stricture

Neonatal Surgery



Mauritian Surgical History



Mauritian Surgical History



Mauritius Paediatric Surgery Services

The Future

Country-wide audit

Centres of excellence

Recognised specialists

Subspecialty certification

International presentation of research







SACIM



Mouchoir Rouge, Mauritius





kind cuts
for kids





kind cuts
for kids