

# PRÓTESES PENIANAS CONSIDERAÇÕES TÉCNICAS

**Nuno Tomada, MD, PhD**

**Serviço de Urologia do Hospital S. João  
Faculdade de Medicina do Porto**

Ligeira

Disfunção eréctil

Grave



Psicogénica

Mista

Orgânica

Psicoterapia

Administração oral

Terapêutica intra-uretral

Injecção intracavernosa

Prótese peniana

# Próteses Penianas Semi-rígidas



AMS MALLEABLE 650™ PENILE PROSTHESIS

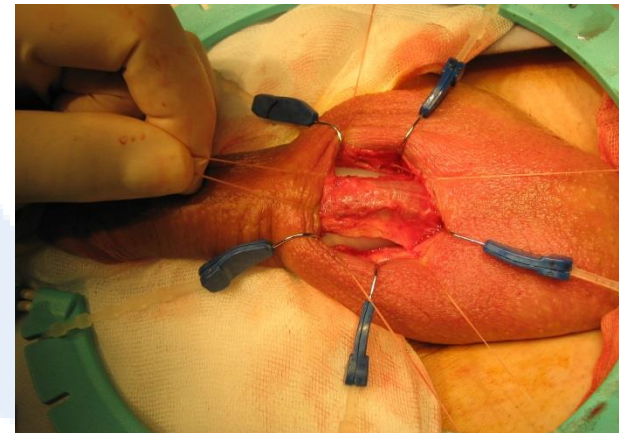
**Doentes mais idosos**

**Baixa capacidade manual**

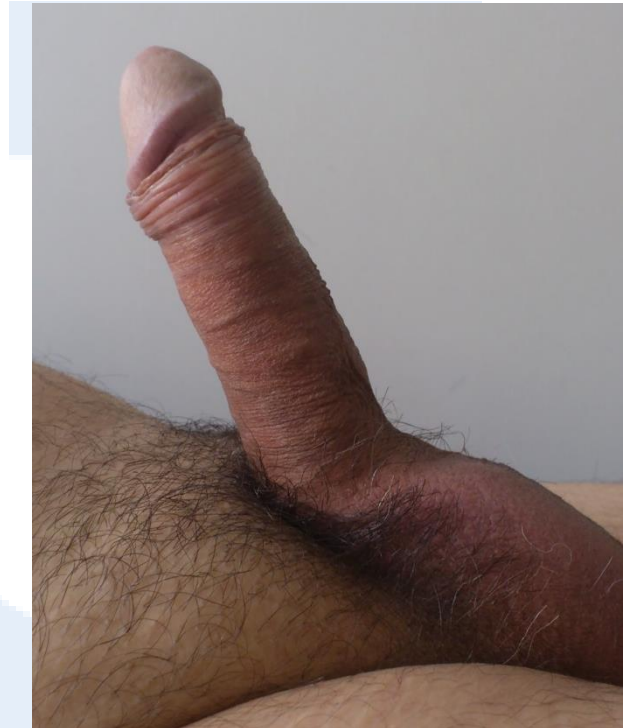
**Menor taxa de disfunção mecânica**

**Custo mais reduzido**

**Pior Estética e Funcionalidade**



# Resultado Estético e Funcional

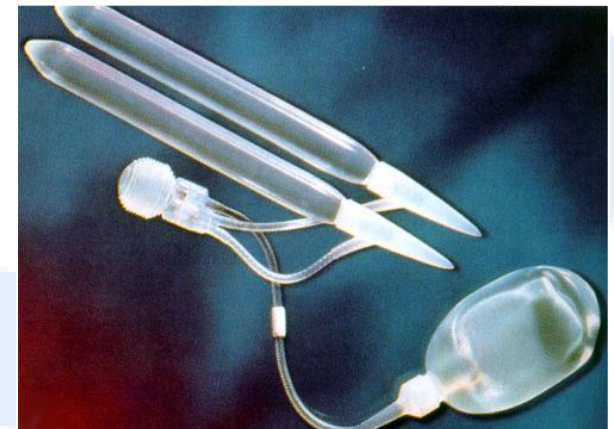
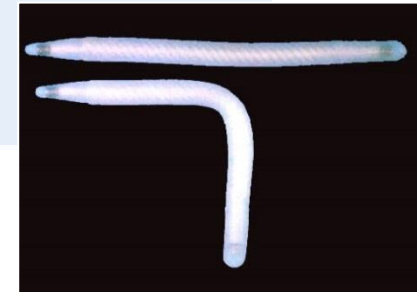


# Prótese peniana insuflável

## 1973 Brantley Scott

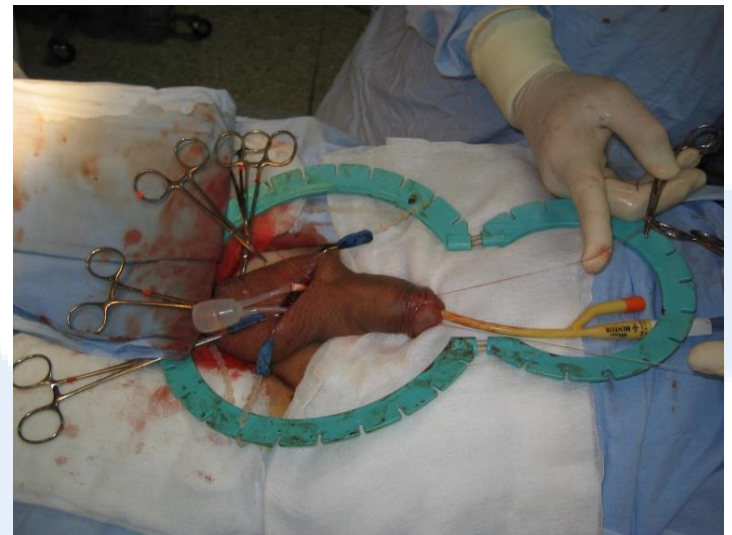


1930–1940s	Reconstructed penis, typically for war injuries had stents/ribs placed for rigidity [4–7]
1950–1960s	First artificial penile implants placed beneath Buck's fascia, outside corpora [8–10]
1966–1973	Artificial rods placed beneath the tunica albuginea (intracavernosally) [11–13]
1973	Brantley Scott introduces the IPP with high failure rates and complex implantation [22,23]
1974–1990s	Design improvements lower failure rates and simplify the implantation [14–21,24–34]
1996–2005	Salvage rescue and revision washout techniques combat infection [40,46–48]
2000–2002	Antibiotic coatings on the penile prosthesis appear to lower infection rates [35,36]



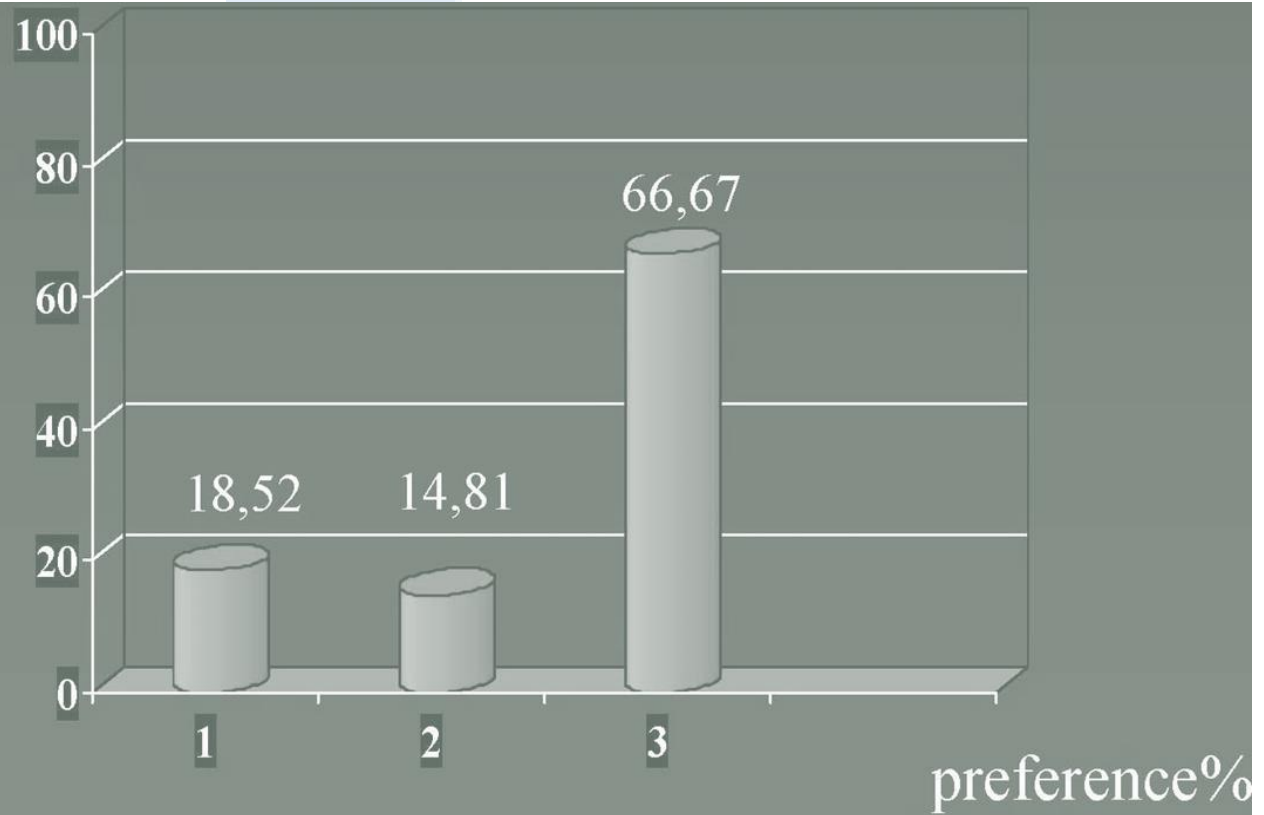
# Próteses Penianas Insufláveis

## 2 componentes vs 3 componentes

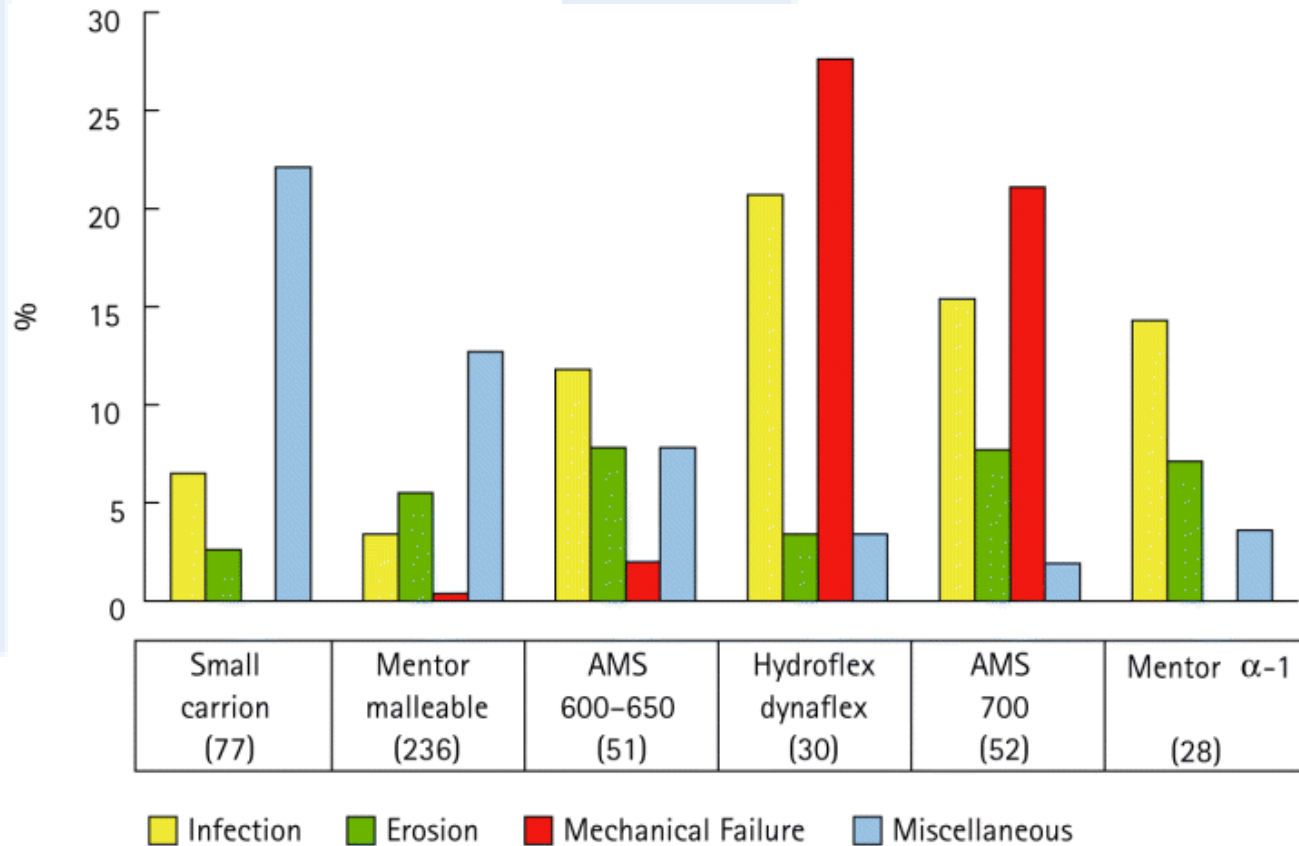


# Estudos de Preferência

- 1) malleable
- 2) inflatable 2-piece
- 3) inflatable 3-piece



## Outcome of penile prosthesis implantation for treating erectile dysfunction: experience with 504 procedures



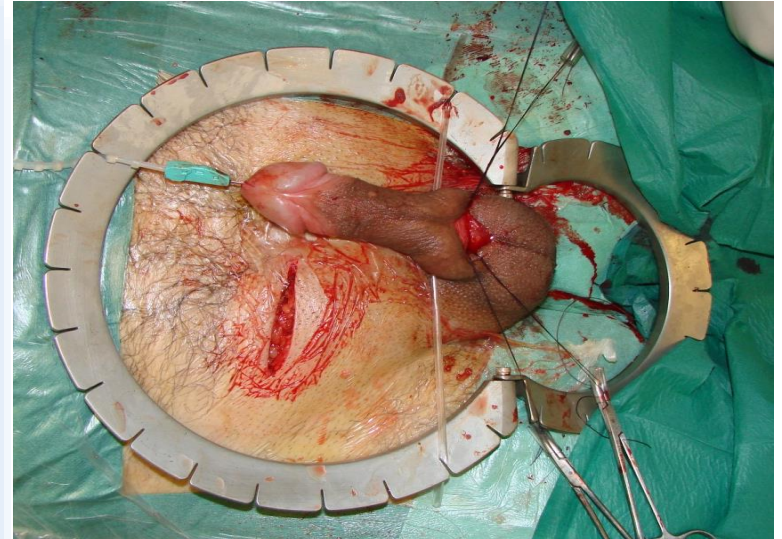


# Desvantagens

**Custo**

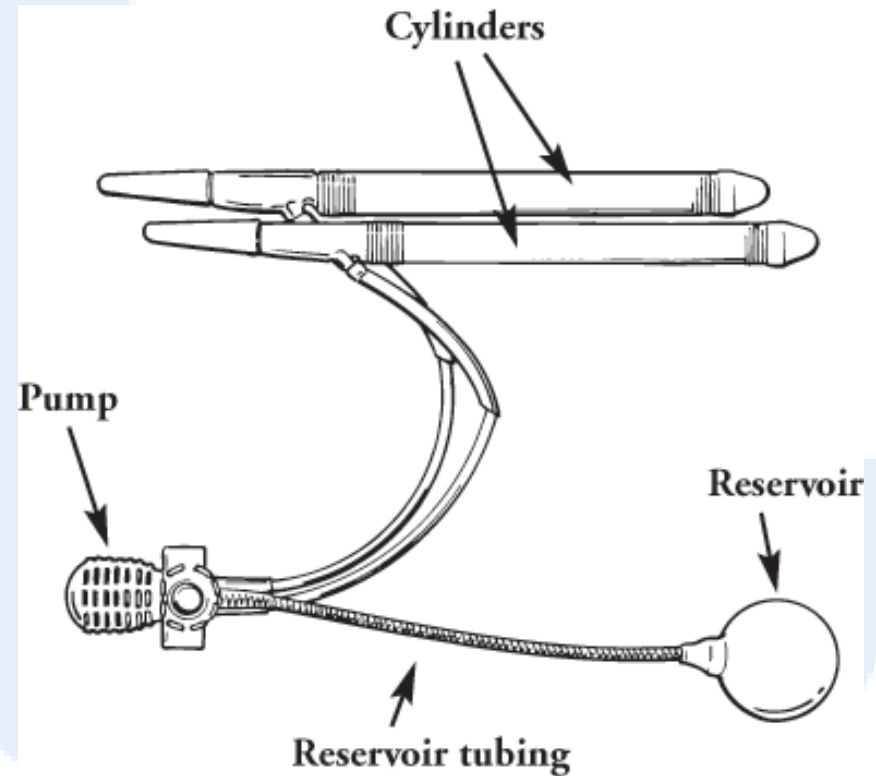
**Incapacidade manual**

**Anomalias anatómicas escrotais ou abdominais**

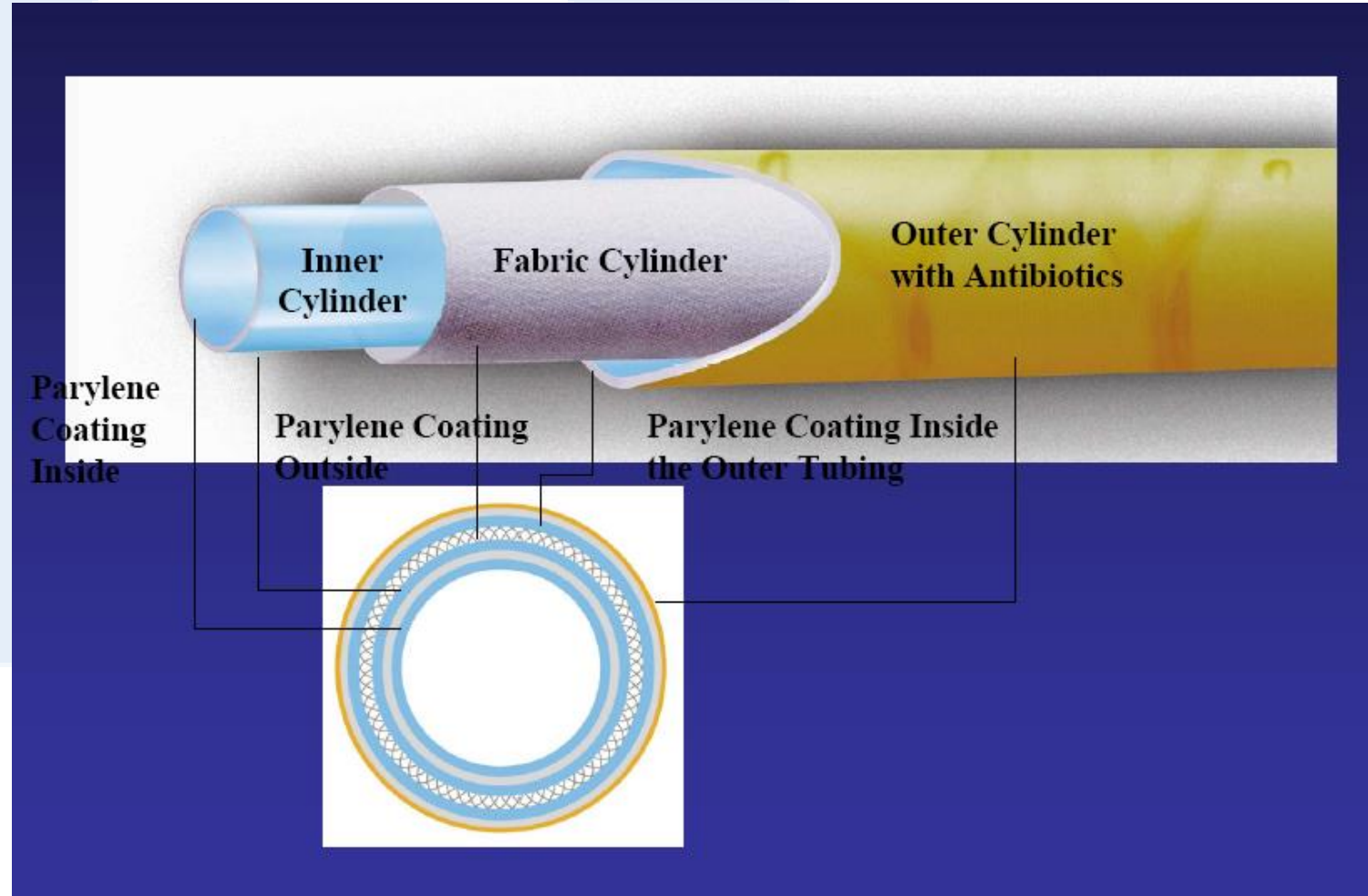


# American Medical Systems

- CX
- CXR
- Ultrex- LGX
- Inhibizone<sup>®</sup>
- Bomba melhorada
- Momentary squeeze<sup>®</sup>
- Parilene



# American Medical Systems



# Coloplast – Titan Resist

- Titan
- *Narrow base*
- Bioflex<sup>®</sup>
- Resist<sup>®</sup> – revestimento PVP
- Válvula Lock-out<sup>®</sup>
- *One-touch release pump OTR<sup>®</sup>*

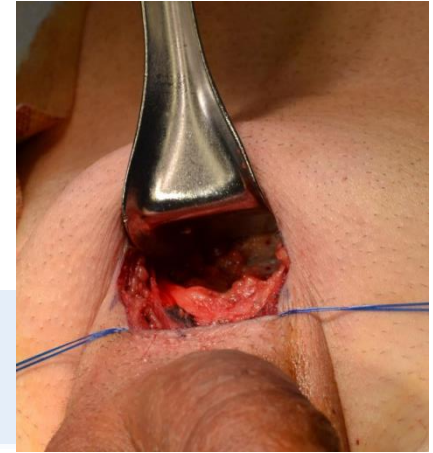
Angulo zero

Extremidade distal menos traumática

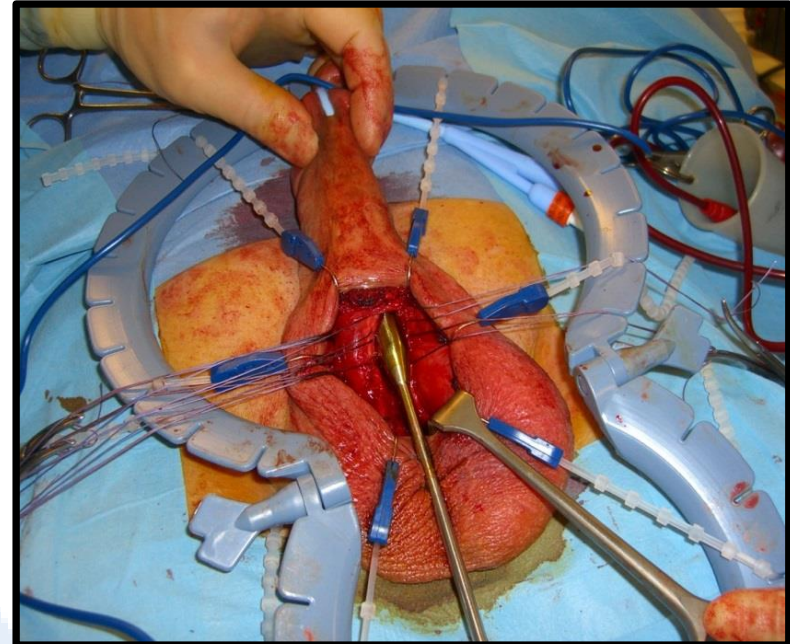
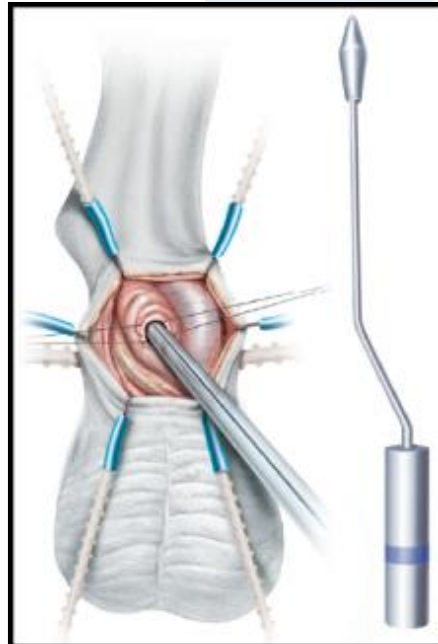
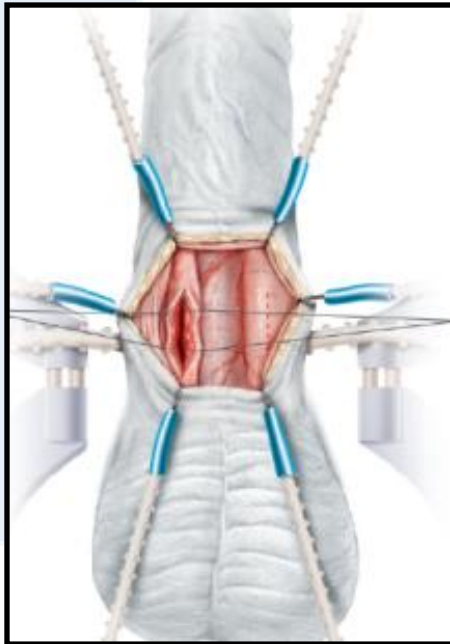


# Abordagem Infrapúbica vs Peno-escrotal ?

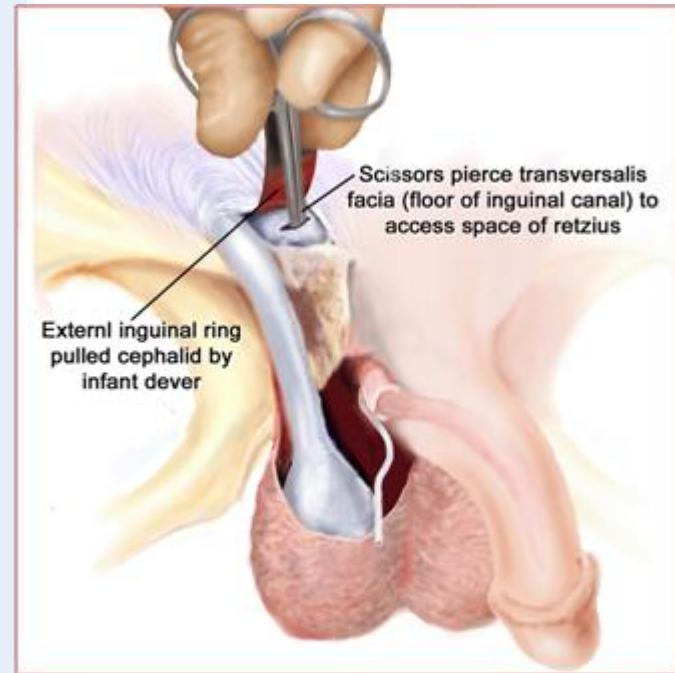
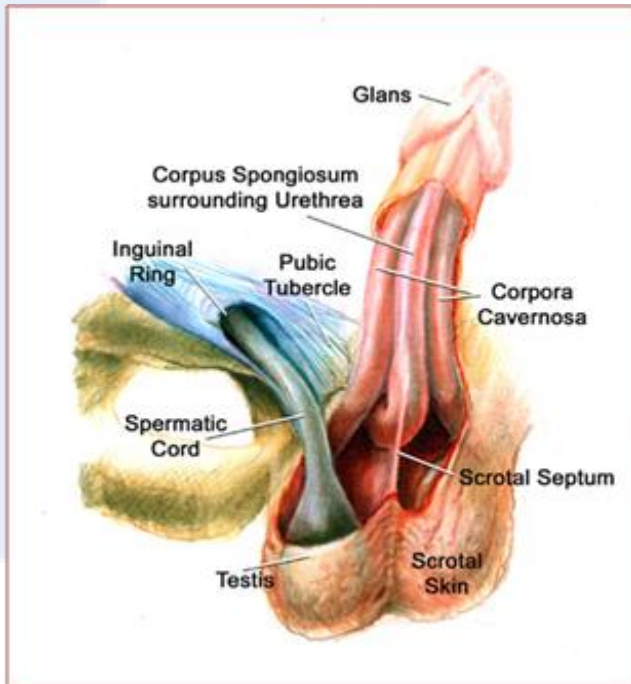
- Exposição dos corpos cavernosos
- Lesão do feixe neurovascular
- Resultado estético
- Colocação da bomba na posição correcta
- Colocação do reservatório sob visão directa



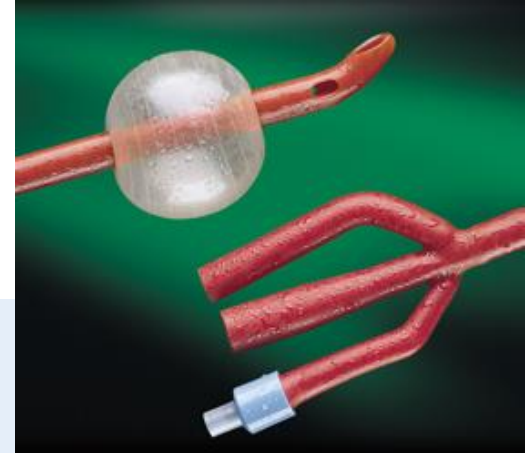
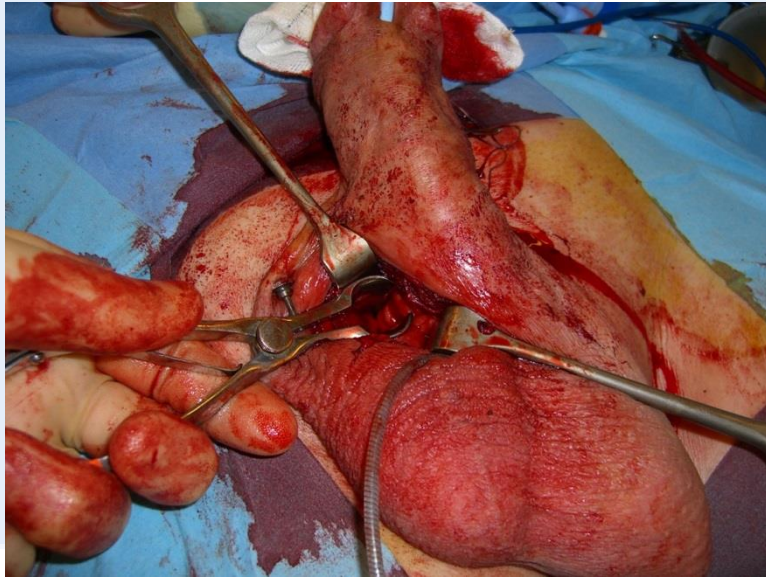
# Cavernotomia e Dilatação



# Colocação do Reservatório



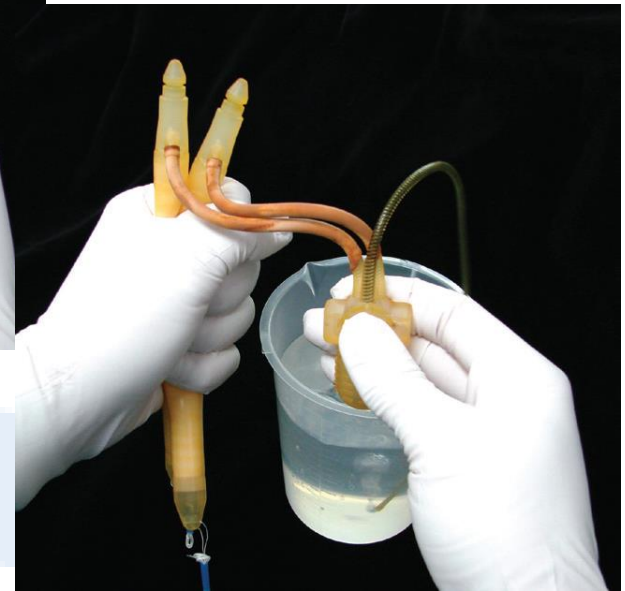
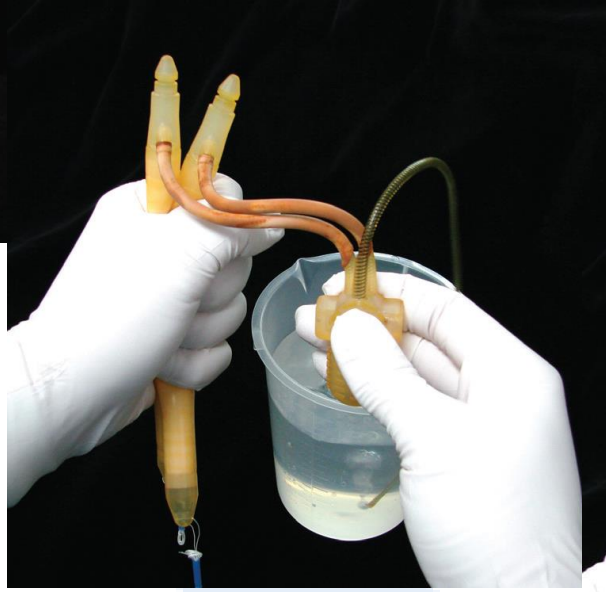
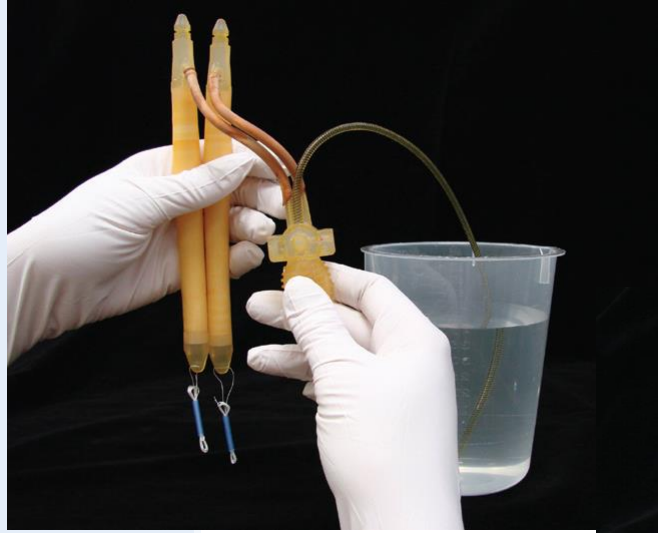
# Colocação do Reservatório



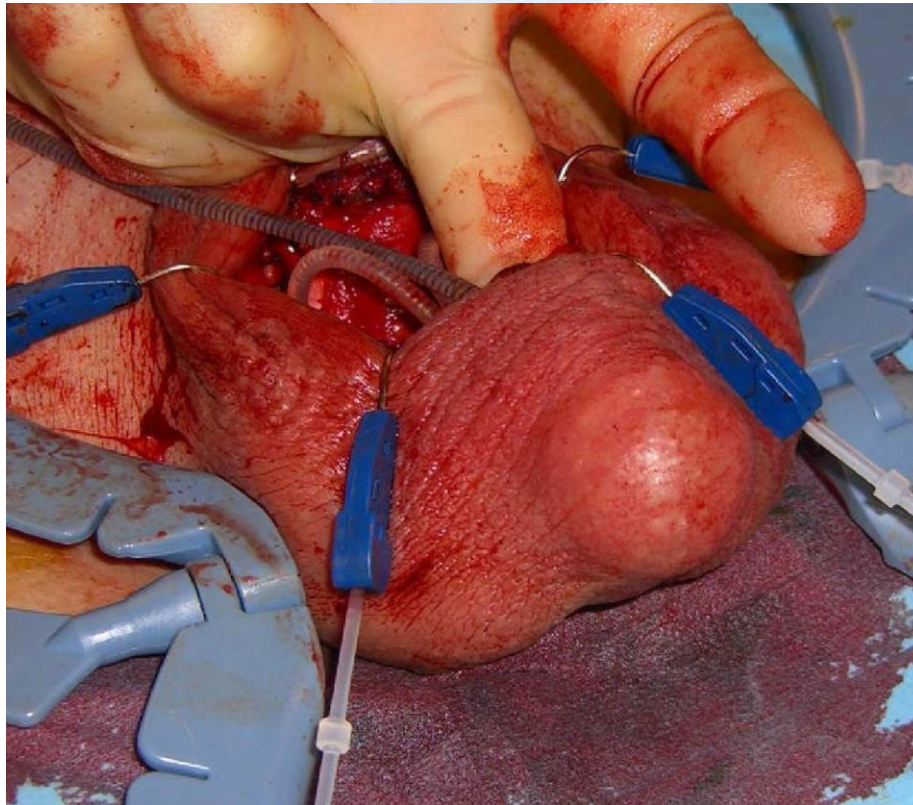
Manobra NT



# Preparação da prótese



# Colocação da bomba



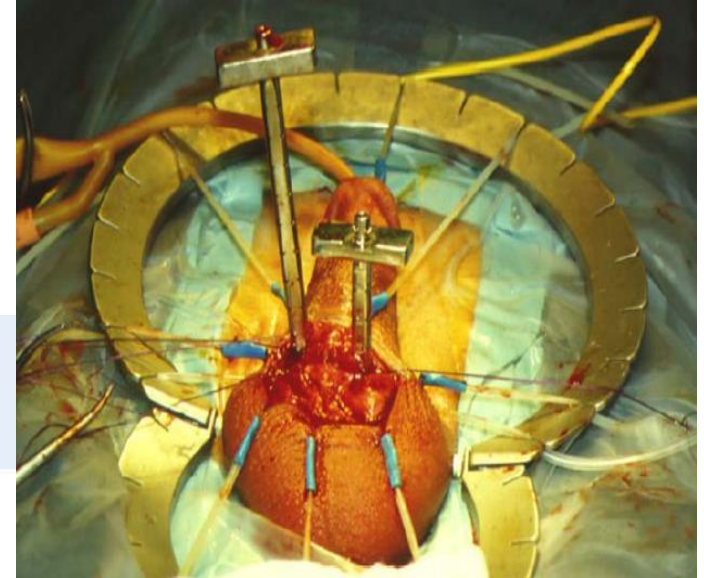
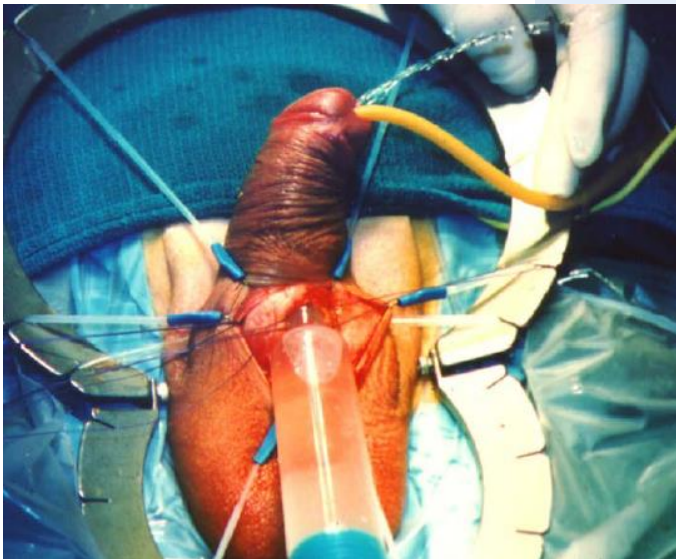
# Complicações

## Intra-operatórias

Laceração da uretra

Perfuração crural

*Cross-over*



# Pós-operatórias

Mecânicas

Infecção

Erosão

Deformidades penianas- SST



# Complicações ...



# A nossa experiência

49 doentes	
Idade média: 61,3 anos	
Titan Coloplast: 20 doentes	AMS 700 CX: 28 AMS 700 CXR: 1
Etiologia	Prostatectomia radical: 20
	Diabetes mellitus e/ou causas vasculogénicas (doença cardiovascular, HTA, síndrome metabólica, dislipidémia, etc.): 23
	Neurogénica periférica (cirurgia colo-rectal, cistectomia radical): 2
	Doença de Peyronie: 3
	Priapismo: 1
Média de seguimento: 19,3 meses.	
Titan Coloplast: 24 meses	AMS 800: 12 meses

# A nossa experiência

Prótese funcional sem intercorrências	43 (85,7%)
Falência mecânica	3 (6%)
Infecção	3 (6%)
Erosão uretral + infecção	1 (2%)
Taxa de satisfação global	93%
Taxa de satisfação doentes com prótese Titan Colopast	88%
Taxa de satisfação doentes com prótese AMS 700	95%

# Profilaxia da Infecção

- ▶ Lavagem antiséptica adequada
- ▶ Restrição movimento de pessoal no bloco op.
- ▶ Antibioterapia e.v. e perioperatória
- ▶ Tricotomia no bloco op.
- ▶ **Inhibizone<sup>®</sup> e Revestimento PVP**

**Taxa de Infecção - 1 a 3% para 0.68 a 1.06%**



# Próteses Penianas

Outras Indicações ?

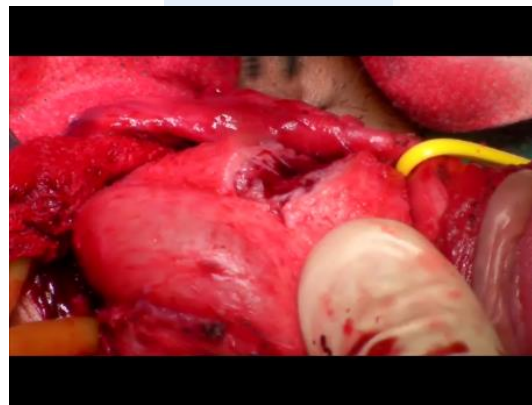
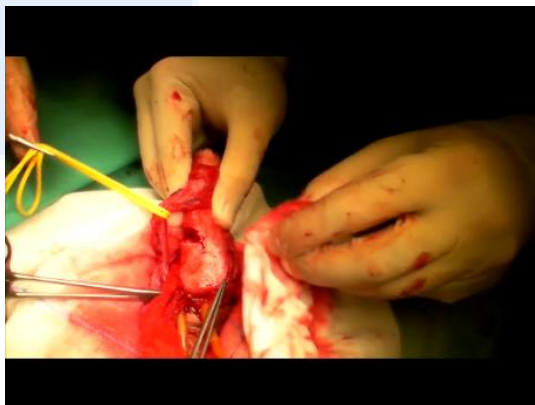
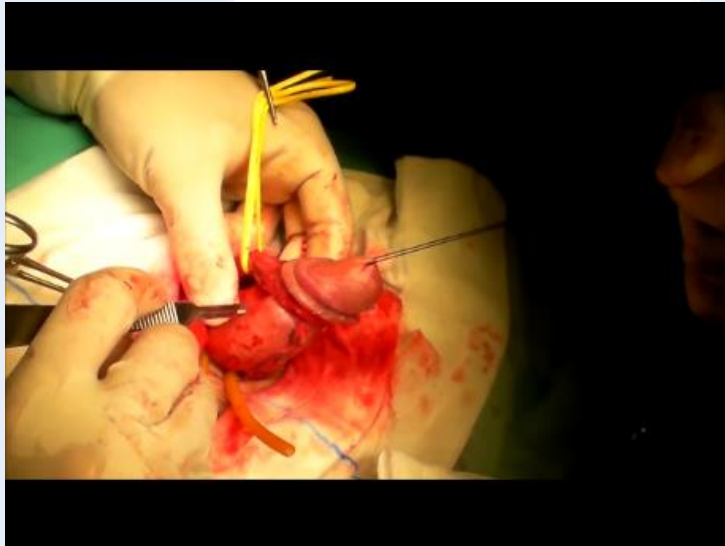
**Doença de Peyronie**

**Amputação peniana**

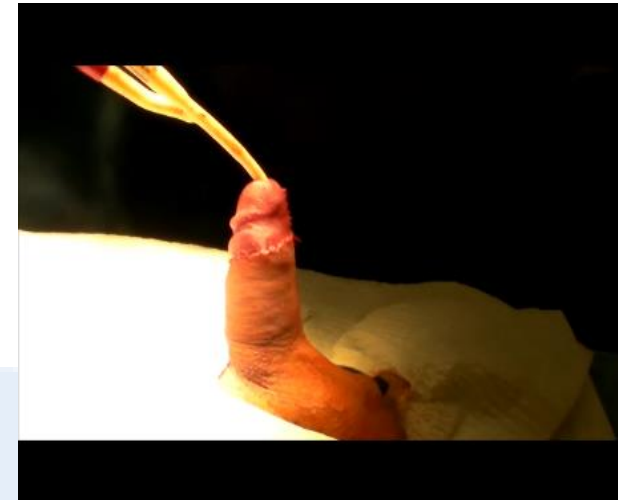
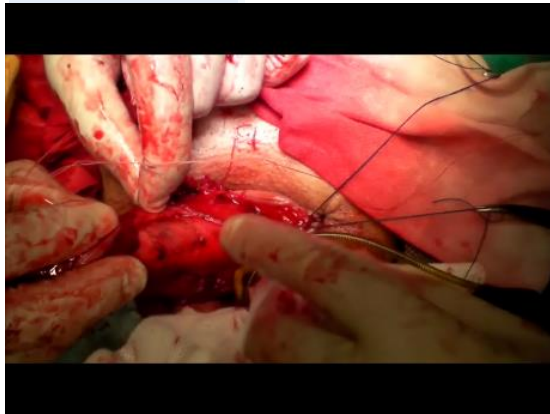
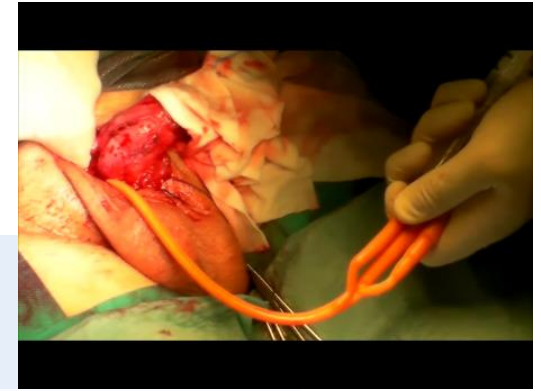
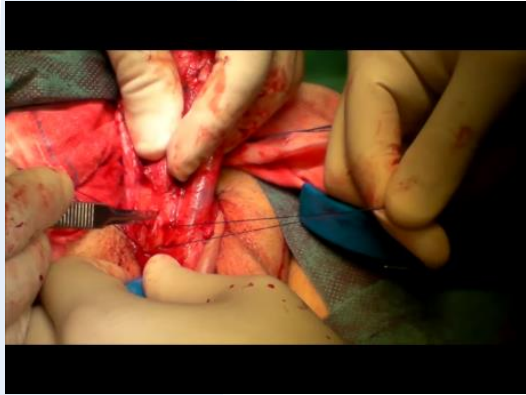
**Micropénis**

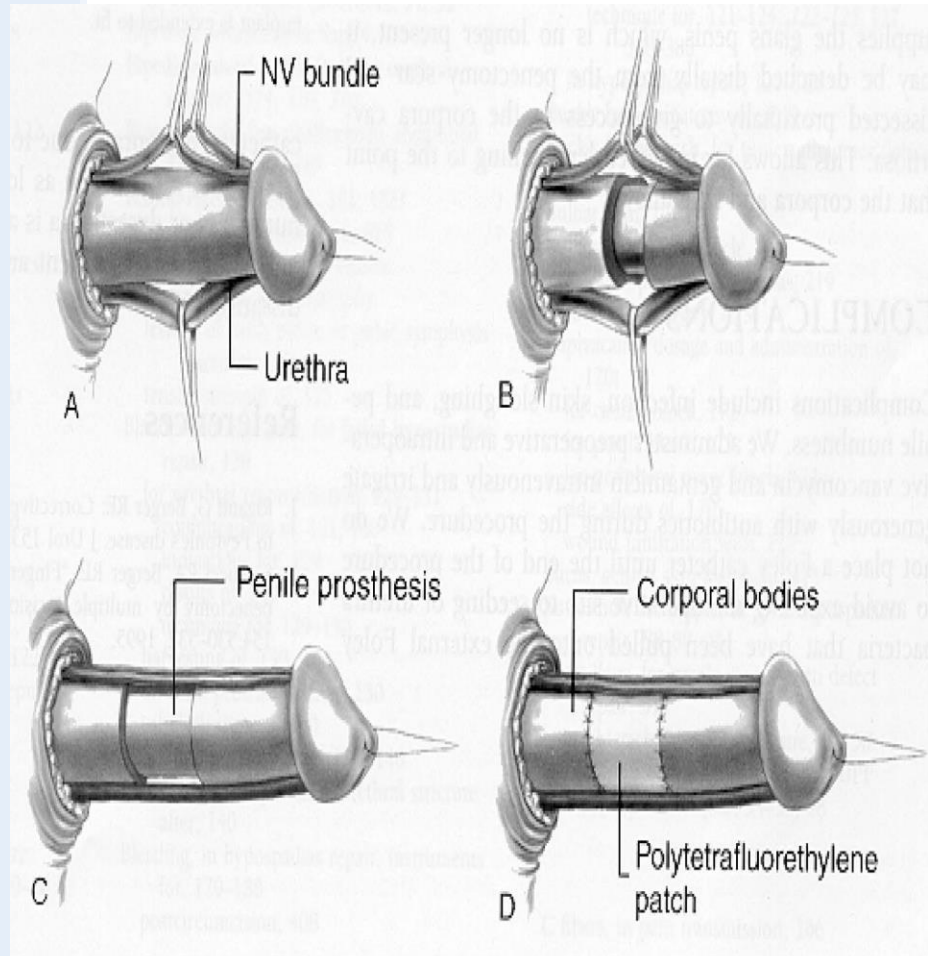
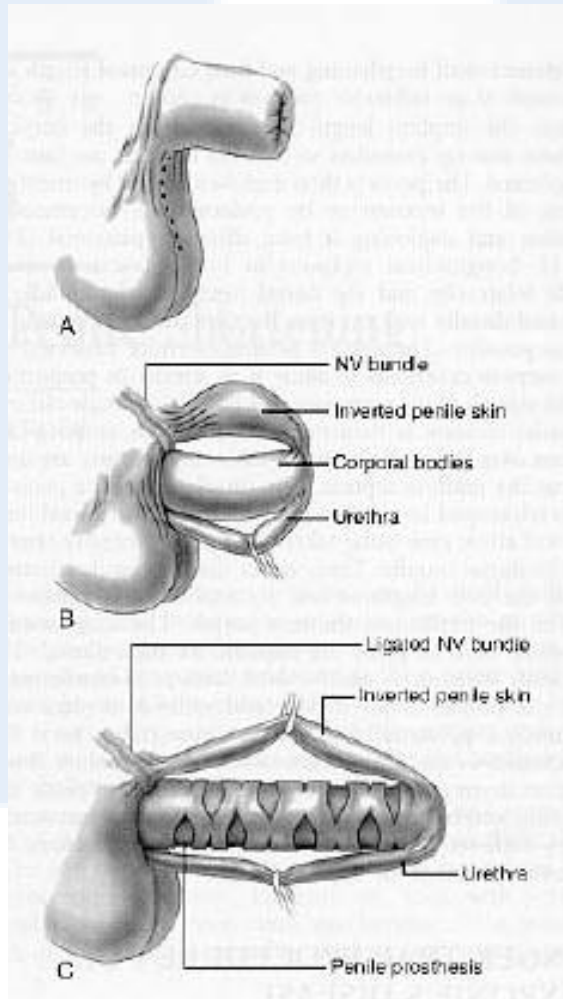
**Transsexualismo**

# Doença de Peyronie e DE



# Doença de Peyronie e DE





Rigaud, J Urol 153:368,1995

# Transsexual

## Female to Male

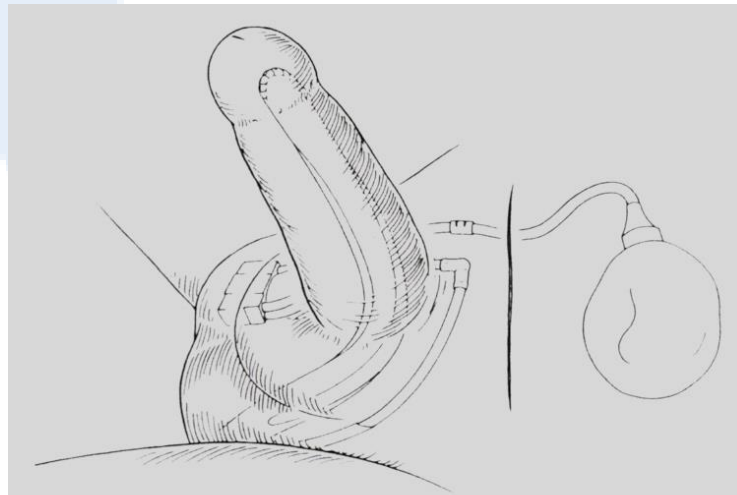


FIG. 4. Placement of various components, in this case multi-component, controlled expansion, hydraulic prosthesis.

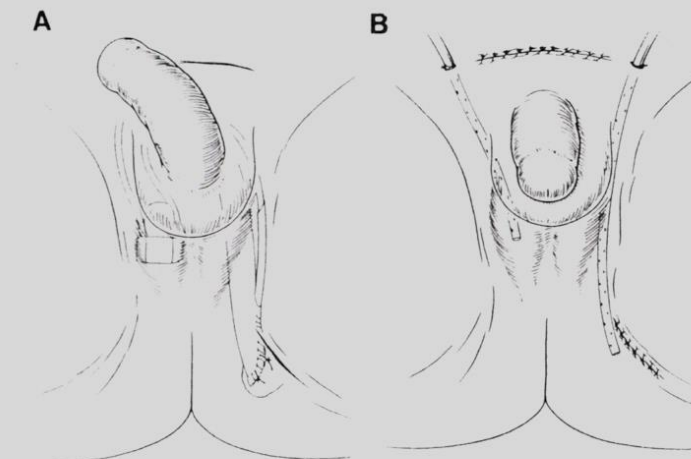


FIG. 5. A, view from lithotomy position demonstrates mechanism of fixation of proximal cylinder to ischial tuberosity. B, view from lithotomy position with incisions closed and suction drains in place.

# Conclusões

- **Tratamento eficaz para DE há mais de 30 anos**
- **Taxas de disfunção mecânica 5-15% aos 5 anos**
- **Taxas de infecção diminuíram com as próteses mais recentes apesar da presença de biofilme**
- **Tratamento mais invasivo mas taxas de satisfação consistentemente elevadas**



*José Paulo Andrade*