



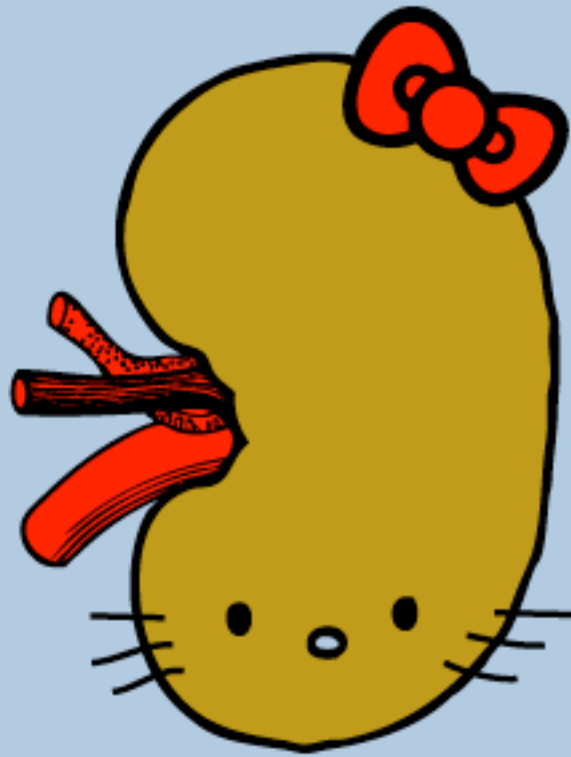
Surgery for
VUR

Alun Williams

Nottingham







Hello Kidney

VUR and evidence

Birmingham Reflux Study

International Reflux Study

Swedish Reflux Study

RIVUR



Birmingham reflux study – BMJ 1987

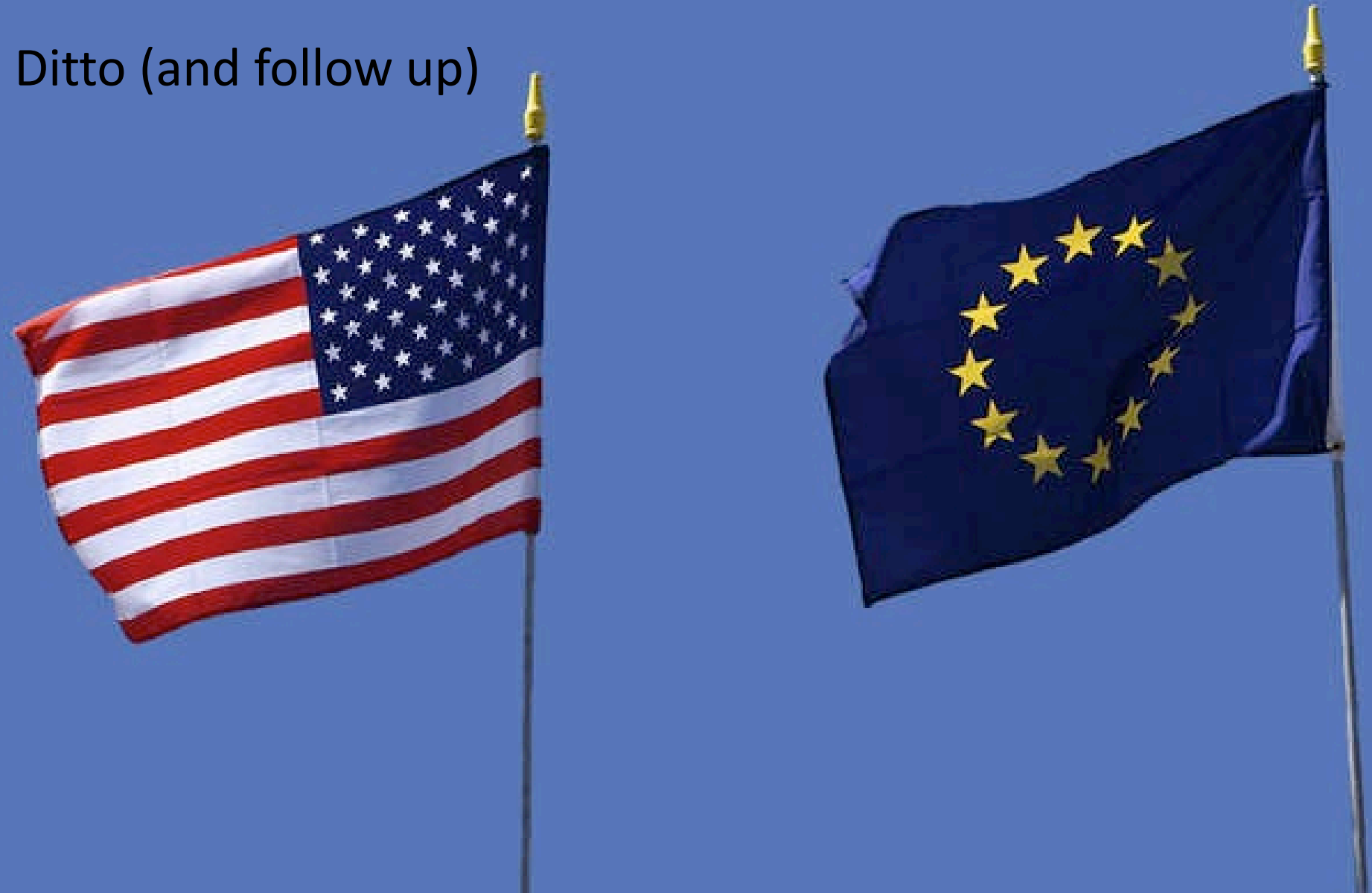
No difference between groups allocated surgery or prophylaxis

Reflux can improve on its own



IRS - J Urol 1992

Ditto (and follow up)



Swedish Reflux Trial – J Ped Urol 2011

Prophylaxis decreases UTI recurrence
So does injection

An aerial photograph of a river with a prominent meander. The river is dark blue, contrasting with the surrounding green and brown forested terrain. The meander loop is large and well-defined. The surrounding area is densely wooded with some cleared patches and small structures visible.

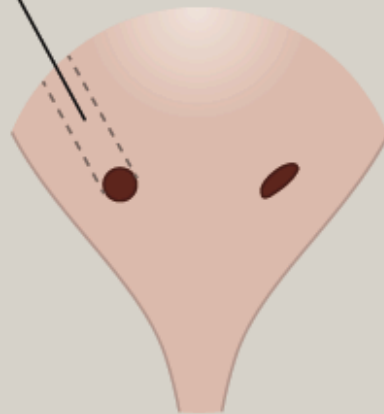
RIVUR – NJEM 2014

Prophylaxis decreases recurrent UTI
but not new scarring

Grade of reflux	Definition	Degree of dilatation	Rate of spontaneous resolution
1	reflux into non dilated ureter	Non-dilating	80%
2	reflux into pelvicalyceal system		
3	reflux with ureteric and pelvic dilatation		50%
4	reflux with pelvicalyceal dilatation and ureteric tortuosity	Dilating	20%
5	gross dilatation, ureteric tortuosity, loss of papillary impression		

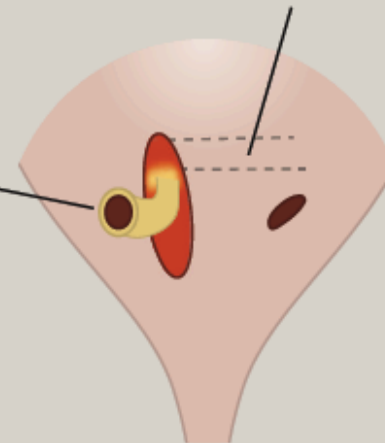
Cross-trigonal reimplantation

Path of refluxing ureter



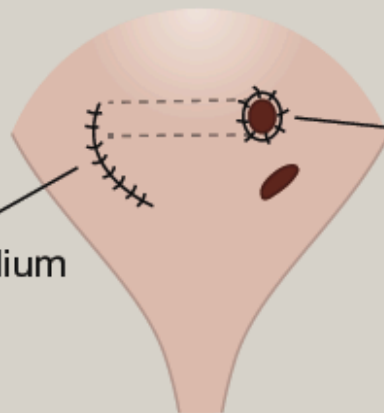
Creation of suburothelial tunnel

Ureter mobilised by dissection around UO inside bladder

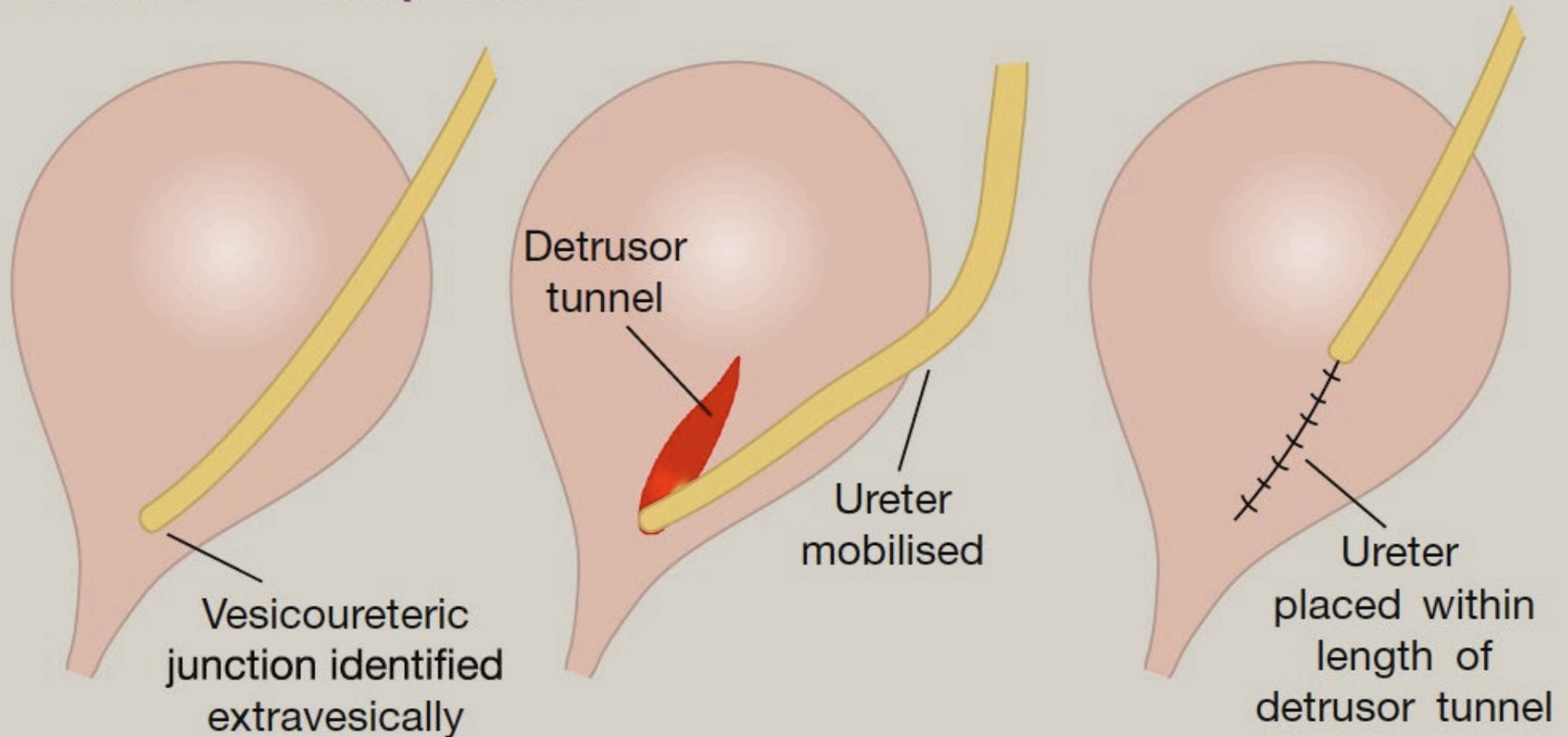


Ureter tunneled across trigone

Urothelium closed

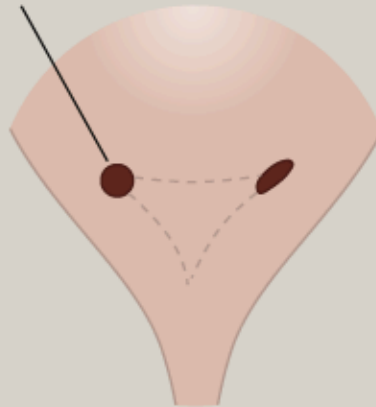


Extravesical reimplantation

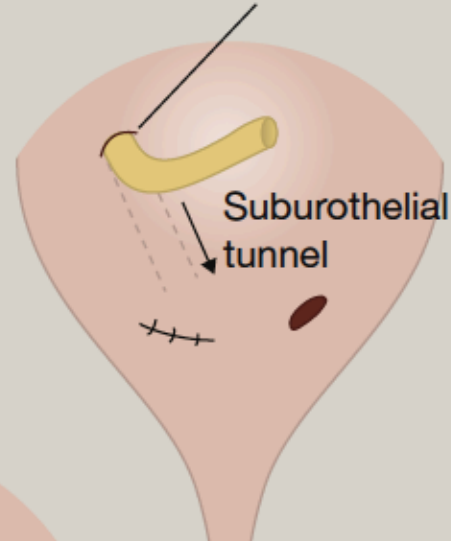


Leadbetter-Politano reimplantation

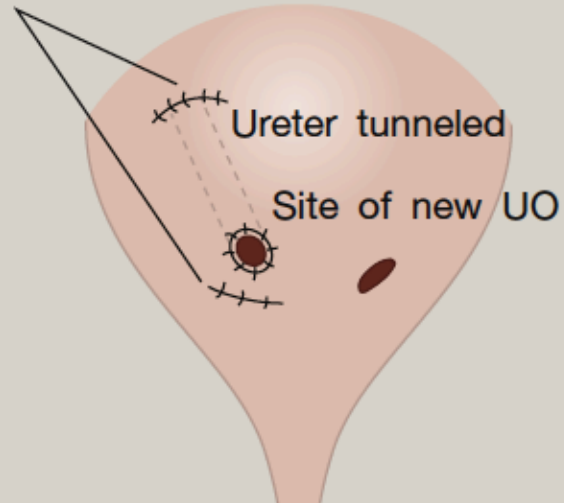
Refluxing right UO mobilised
outside bladder



Ureter brought through
new hiatus in posterior
wall of bladder



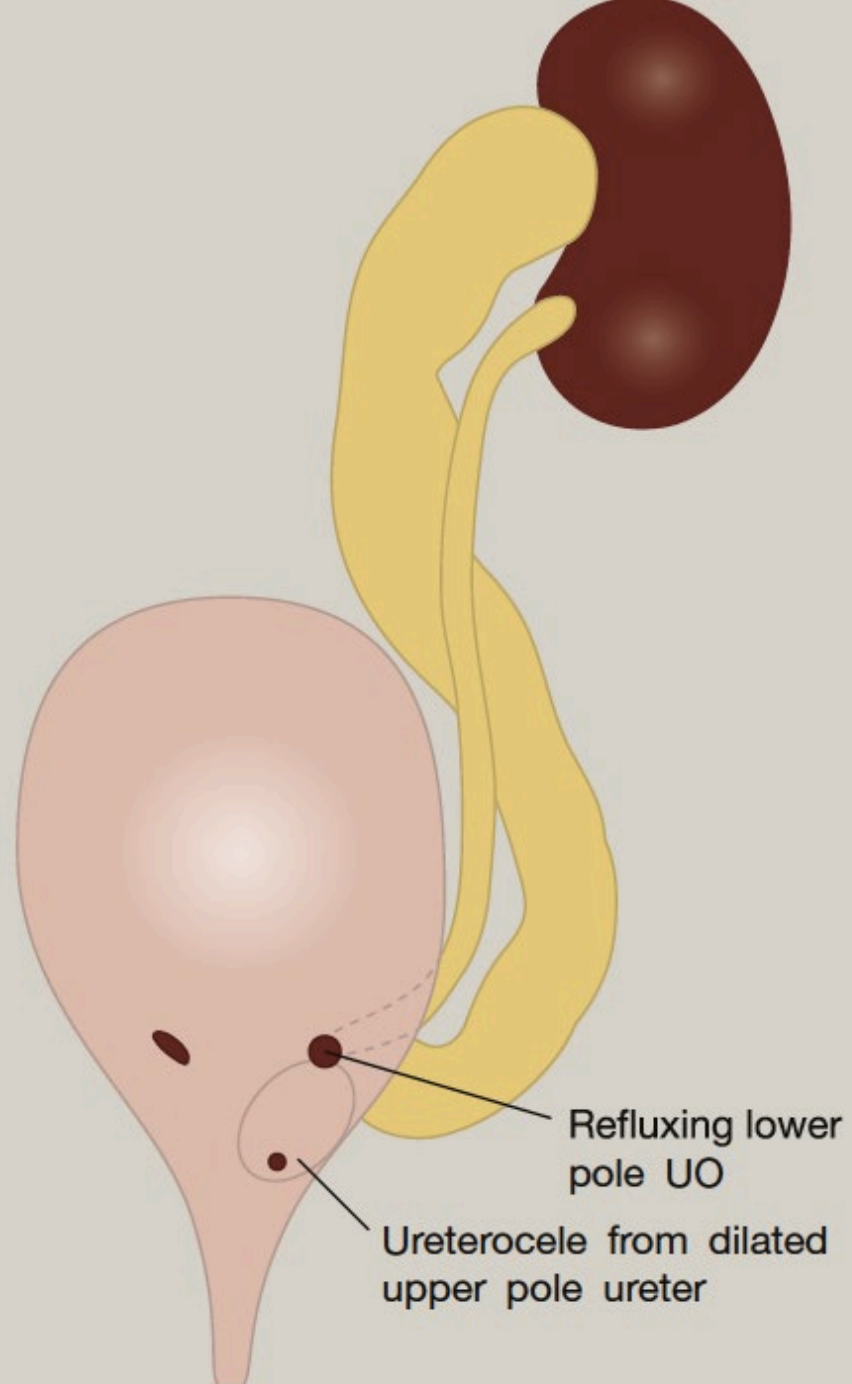
Urothelial defects
closed



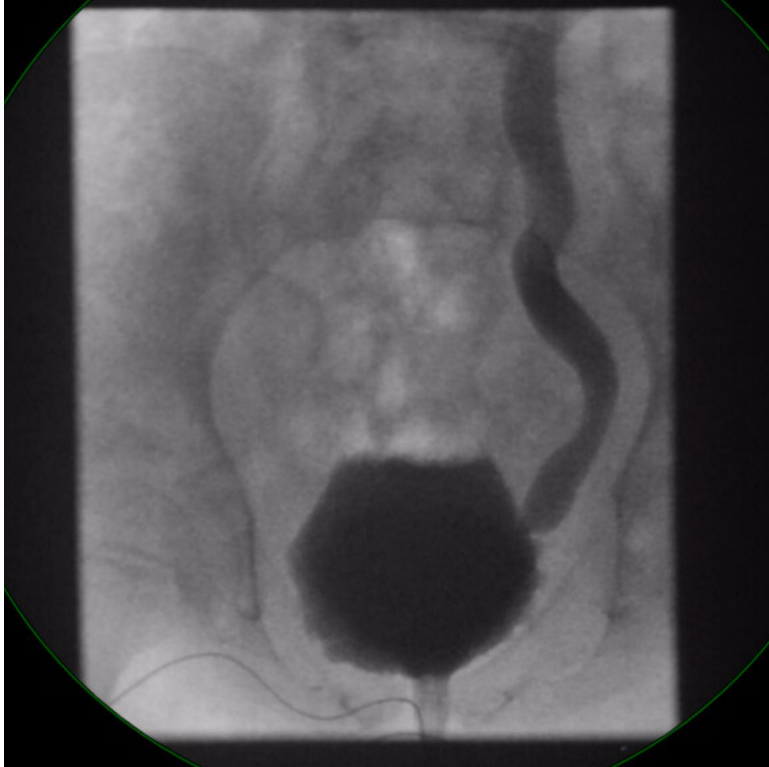


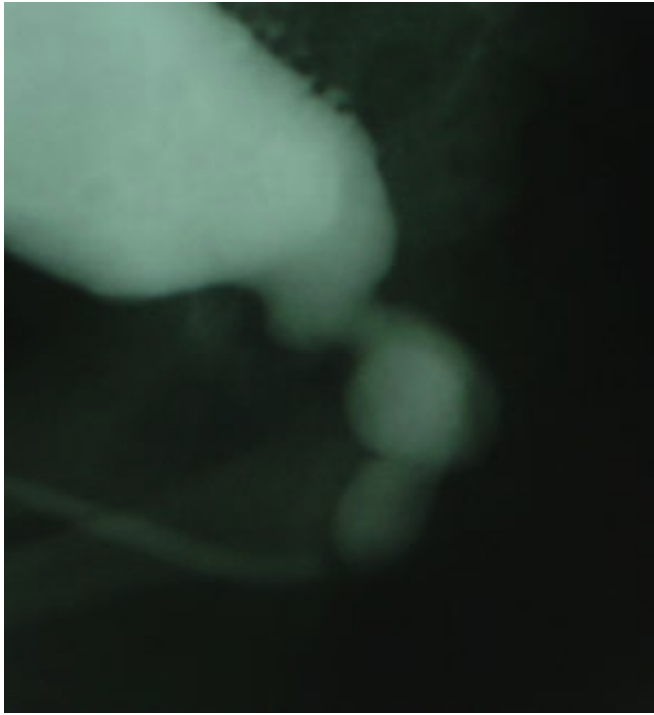
The Truth About Teflon











Circumcision & UTI

100 operations

prevent

1 UTI

Circumcision & UTI

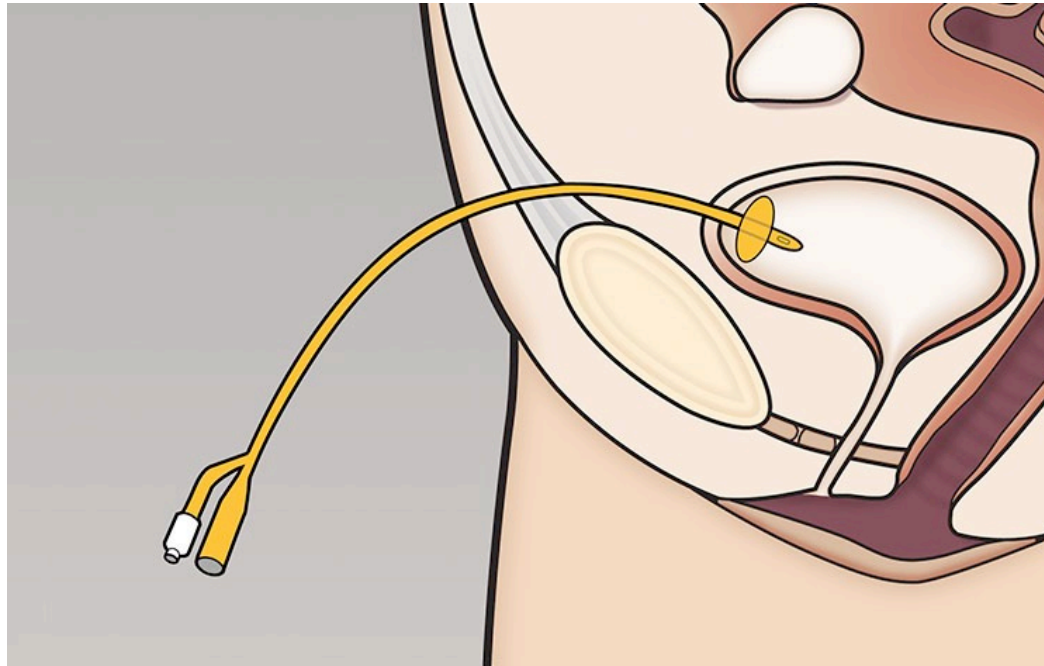
‘At risk’ boys (NNT much lower)

PUV

VUR

Neuropathic bladder (also to aid ISC)

Recurrent UTI



VUR

A risk factor for UTI

NOT the cause of ERD

Sometimes resolves

Can be downgraded by surgery

Treat voiding problems aggressively

