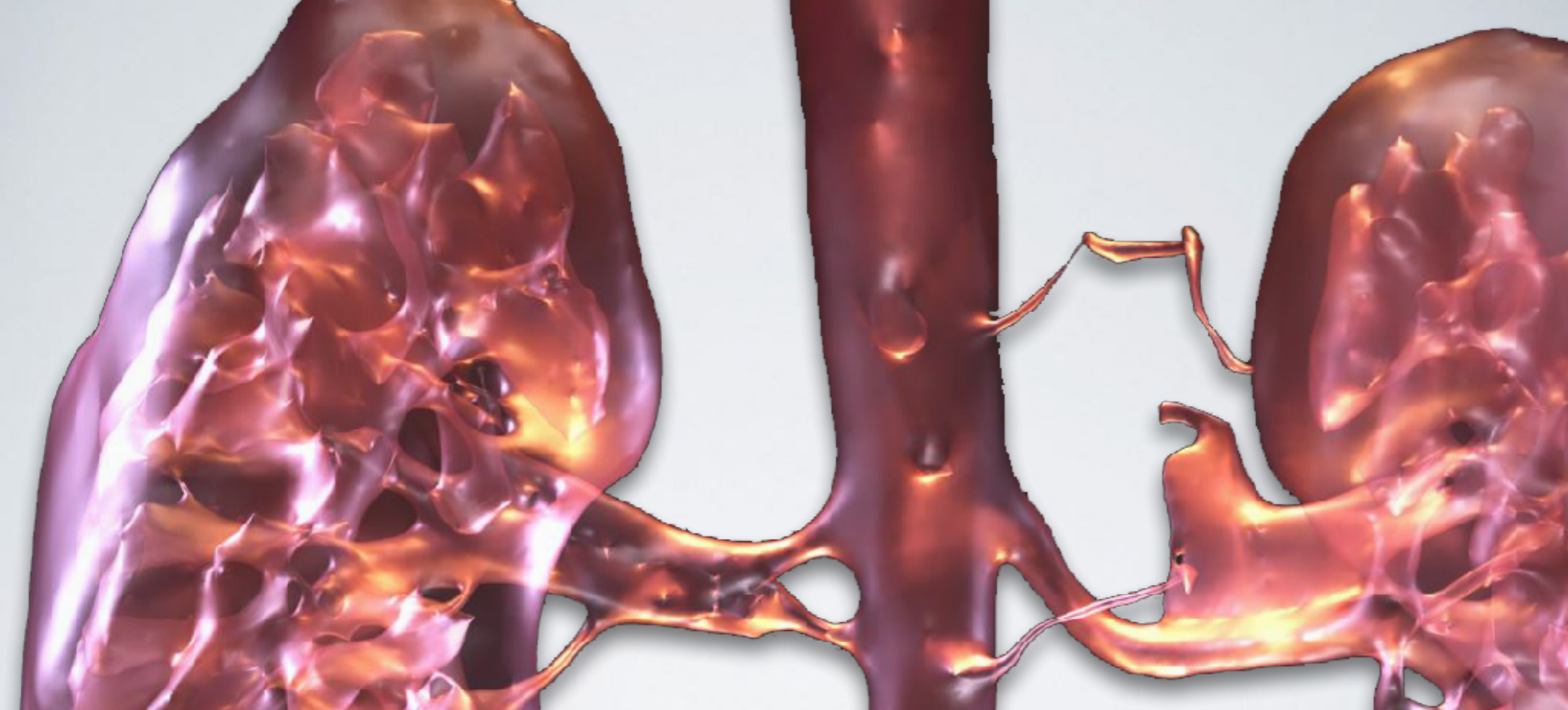




URINARY DIVERSION

When all else fails

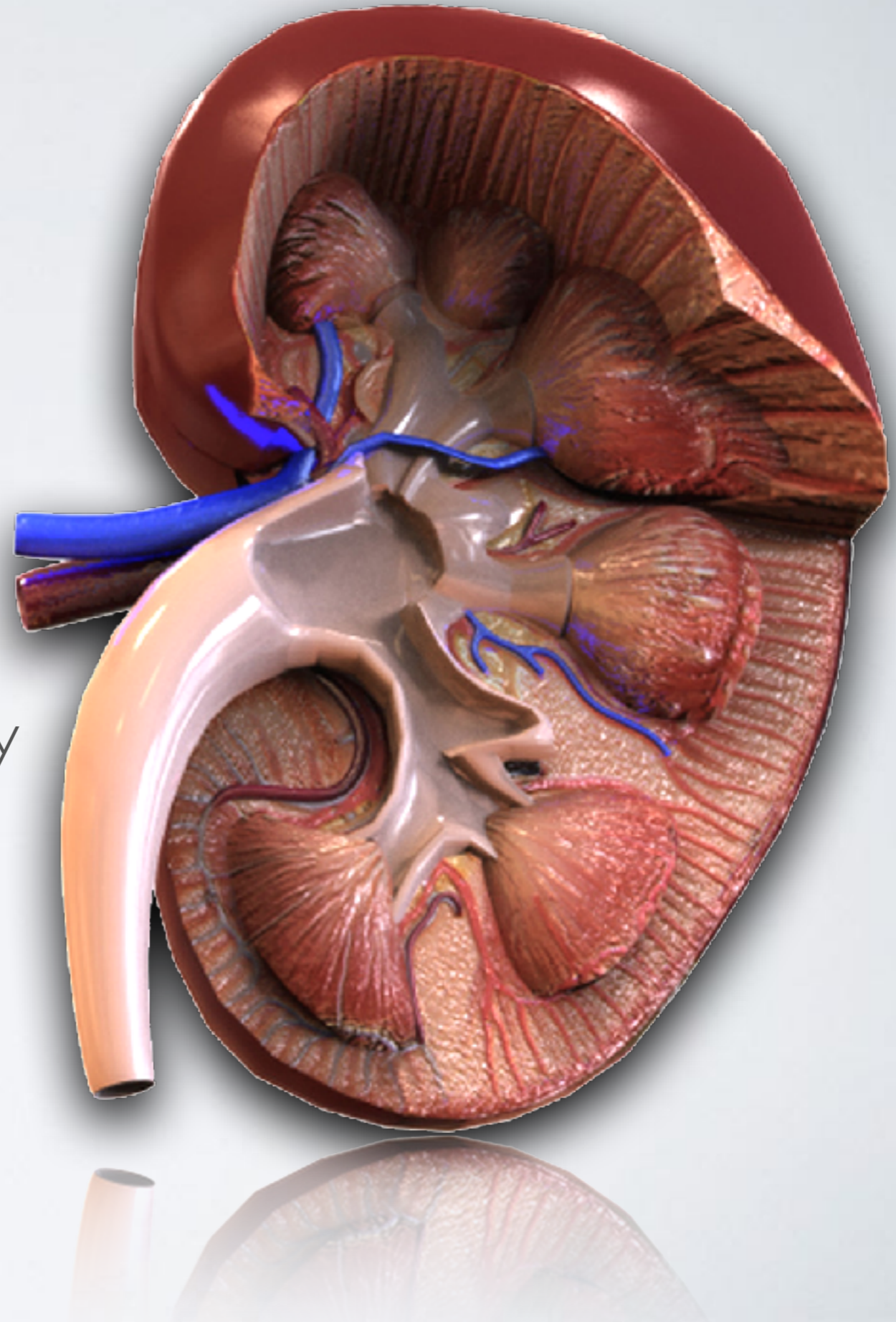
Hung Do



surgical procedure to
reroute urine flow

REASONS FOR URINARY DIVERSION

- enlarged prostate
- injury to the urethra
- birth defects of the urinary tract
- kidney, ureter or bladder stones
- tumours of the genitourinary tract
- pressure to the genitourinary organs
- bladder removal
- malfunctioning bladder





its all to do with the bladder





the type of urinary diversion performed depends of the urinary bladder function.



temporary urinary diversion

2015		NOVEMBER					2015
MON	TUE	WED	THU	FRI	SAT	SUN	
26	27	28	29	30	31	1	
2	3	4	5	6	7★	8	
9	10	11	12	13	14	15	
16	17	18	19	20	21	22	
23	24	25	26	27	28	29	
30	1	2	3	4	5	6	

★ Hung's Birthday

temporary urinary diversion

2015		NOVEMBER					2015
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★ Hung's Birthday

temporary urinary diversion

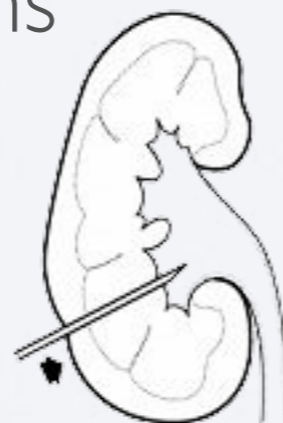
- 1 nephrostomy
- 2 urinary catheterisation

In both cases, the urinary bladder functions normally. The clinical justification for a nephrostomy is when the kidney under performs with marked hydronephrosis. And urinary catheterisation is often done post surgery, during surgery or for incontinence.

temporary urinary diversion

nephrostomy

- often radiology guided procedure
- direct insertion through a stoma into the kidney
- urine is drained in an external bag
- nephrolithotomy & drainage complications



A Needle inserted into kidney



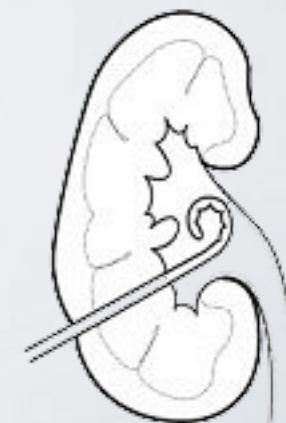
B Guidewire passed through needle



C Needle removed with guidewire in the kidney



D Catheter placed over guidewire

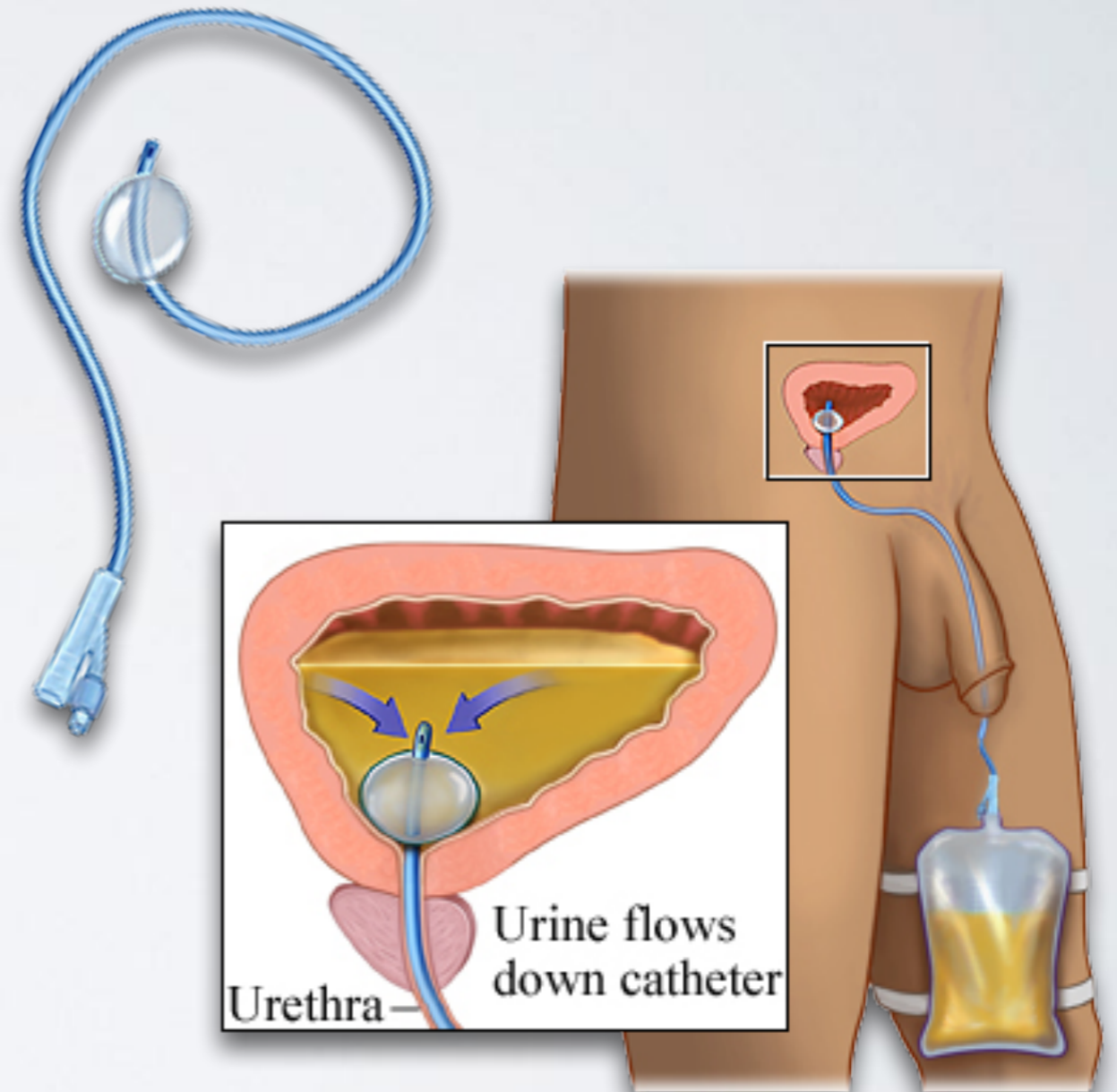


E Catheter in position

temporary urinary diversion

urinary catheterisation

- insertion of Foley's catheter into urinary bladder via the urethra
- commonly referred to as a suprapubic catheter



permanent urinary diversion

1 rerouting urine flow
to an external pouch
(aka urostomy and non-continent urinary diversion)

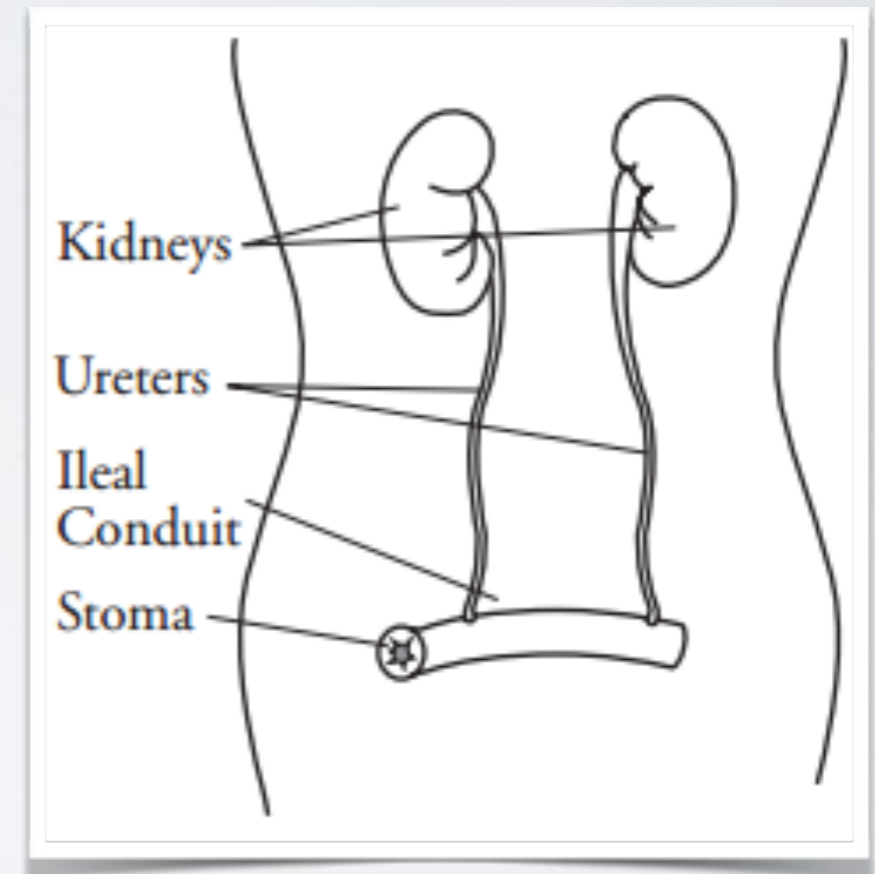
2 creating an
internal reservoir
(aka continent urinary diversion)

When the urinary bladder is damaged or removed, a permanent way to divert urine is required.

Urostomy

ileal conduit

- 🔧 a section of the small intestine is removed
- 🔧 serves as a connection from the ureters to the stoma
- 🔧 urine flows through this system to an external pouch



Urostomy




cutaneous ureterostomy

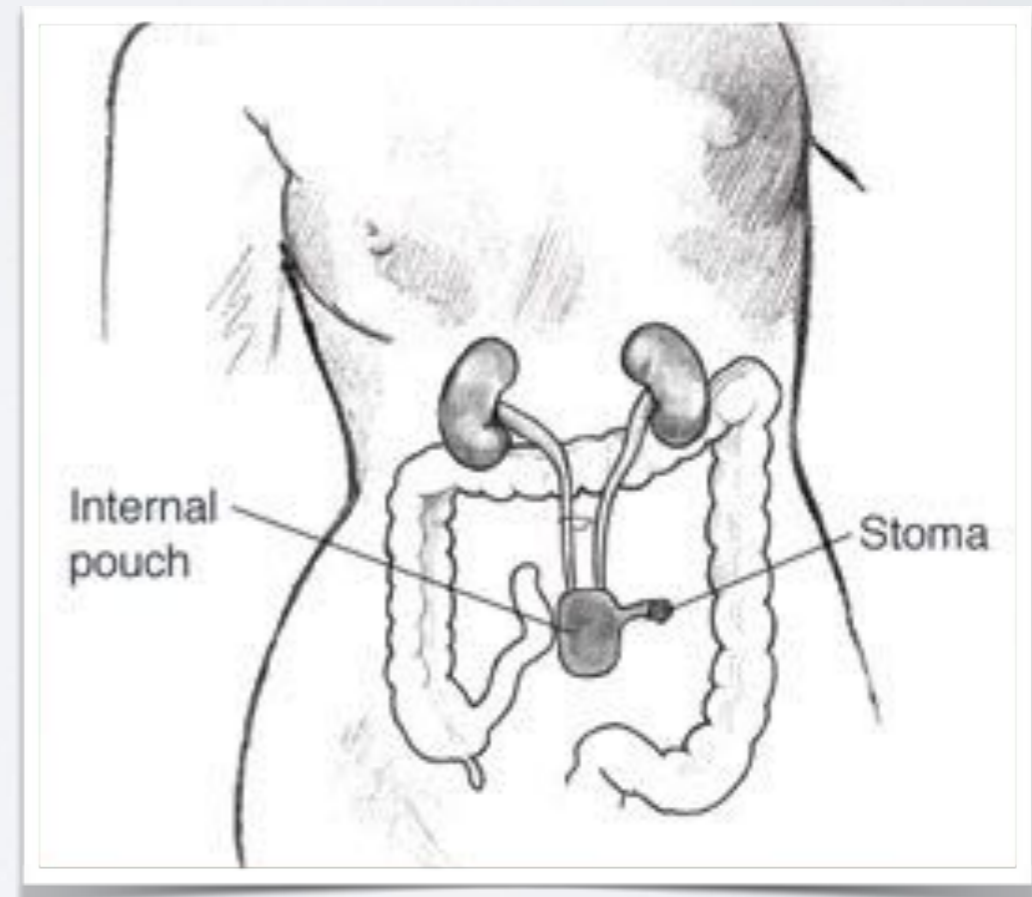
- the ureters are directly attached to the stoma
- no conduit is required
- performed when bowel cannot be used



Continent Urinary Diversion

continent reservoir

-  a one-way reservoir is created and connected to stoma
-  urine flows through the ureters into the reservoir
-  the patient inserts catheter into stoma to drain reservoir



Continent Urinary Diversion

bladder substitute

- an internal reservoir connecting the ureters at one end and urethra at the other
- 'normal' function
- high chance of urinary incontinence

