

S2:-

- * Symptoms depend on the the age of the child
- * Significant number of bacteria without symptoms is called "asymptomatic bacteriuria" which is more serious in children and if we leave it it will change to symptomatic

S3:-

- * more prevalent in girls due to their tendency to have recurrent cystitis

S4:-

- * UT anomalies pt's mostly present as UTI
- * UTI is not simple as sore throat, it could indicate an underlying anomaly (VUR, pelviureteric junction stenosis and neurogenic bladder) if not treated early could cause CKD

S5:-

- * not usually simple urethritis happens more often pt. has cystourethritis and both could be viral or bacterial and LUTI doesn't have bad sequences
- * LUTI is associated with some degree of cystitis

S6:-

- * Obstructive is more serious due to ~~damaging~~ damaging effect of infection to the kidneys + pressure of urine on them
- * Congenital such as obstruction of the base of the bladder which is important in males PUV or obstruction between pelvis of ~~testis~~ kidney and ureter. (Pelvi Ureteric Junction stenosis) which discovered in utero
- * Acquired like stones
- * Constipation should be relieved to prevent abnormalities in bladder control \Rightarrow recurrent infection

S8:-

- * due to vasculature of kidney infection in it can cause sepsis

S9:-

- * Fever could be the only presentation
- * Failure to thrive especially in those w/ significant UT anomaly or recurrent UTI

S10:-

- * Chills & rigors mostly due to ~~UTI~~ UUTI
- * Signs of sepsis could be found

S11:-

* Check vital signs

* mass could be PUS

* wrinkled skin (Prune belly syndrome) → these children complain of defect in their abdominal wall muscles with problems in the muscle wall of bladder and problems in the urethra

* 15% of Pts with hypospadias have other associated anomalies

* ↓ anal sphincter tone → in Pts with spinal abnormality

* uncircumcised children have ↑ risk of UTI

S13:-

* Pts with hypercalciuria could have frequency + urgency

* not every pyuria is UTI it could be leukocytosis

* most of the bacteria converts nitrate to nitrite but not all of them (ex. staphylococcus or fungus)

S16:-

* if urine stored at room temperature bacteria will multiply

* supra-pubic tap especially if Pt. was sick or septic

S17:-

* mostly one species if more it could be due to complex anomalies, prolonged use of antibiotics or catheter.

S20:-

- * E. coli is the pathogen in 75-80% of UTIs in children (as well as in adults)
- * E. coli to Enterococci consists 90-95% of UTI patho.
- * Pseudomonas, Staph. aureus or Klebsiella could indicate a very bad anomaly
- * Pseudomonas is associated with bad consequences
- * Candida is rare but it is very bad infection that is able to cause fungal balls in kidneys or disseminate all over the body and it is ~~considered~~ considered opportunistic infection

S21:-

- * E. coli with its fimbriae & pili to allow it to move

S24:-

- * lower right photo:- P = Pelvis of kidney, I = Calyces of kidney/ they are dilated in this photo which could be due to any cause
- * the same in the lower left photo/ if the ureter was not dilated then the problem is between it and pelvis but if it was dilated then the problem is down to it

S 25:-

- * complete Ureteric duplication
- * it presents with upper part of ureter + pelvis dilation due to ureterocele in the lower part which is an obstructed part of urinary tract. (very tiny opening to the bladder) which will cause it to distend and block upper moiety

S 26:-

- * trabeculations & diverticulae could be due to neurogenic bladder or outlet obstruction

S 27:-

- * Grade 1 is benign usually / ~~2~~ Grade 4+5 are severe grades of reflux

~~S 29:-~~
S 30:-

- * notice dilatation of proximal part of urethra
- * this is one type of neurogenic bladder & it is more in girls

S 31:-

- * haustriations in the lower part + diverticulations in the upper part due to neurogenic bladder or outlet obstruction

S32:-

* Christmas tree bladder (bad type)

S33:-

* Left Photo:- diverticululations + VUR

* Right Photo:- bilateral VUR (Primary because bladder looks fine)

S34:-

* DMSA is good to look for ~~the~~ scars and split kidney function

* CT-urogram → be careful of contrast

S35:-

* apex & lower part of the kidney didn't take the isotope due to scars

S36:-

* Pyelonephritis (DMSA)

S38:-

* black areas is the scar

S45:-

* treatment according to sensitivity test.