Evaluation of Proteinuria

Positive urine dipstick

asymptomatic

Repeat, 4 occasions

some samples -ve

Transient Proteinuria (no further renal work up required)

If all samples +ve

symptomatic

1) Early morning U protein/creatinine ratio X 3 consecutive days
2) U microscopy
3) Blood pressure

U prot/creat ratio <0.2, normal U microscopy & BP

Orthostatic Proteinuria check with week morning and afternoon samples

U prot/creat ratio >0.2, abnormal U microscopy & BP

Significant Proteinuria

Significant Proteinuria
1. S creat, U&Es, C3&4,ANA, S albumin
2. US scan

Above results normal, U prot/creat ratio 0.2-1 & asymptomatic

Isolated Proteinuria

4-6 monthly FU
NB: Ref to joint renal clinic

Above results abnormal or symptomatic

Suggestive of tubular disorders
1. Blood gas
2. Urine pH, glu, PO4
3. S/S of primary disorder
4. US scan (reflux, dysplastic, polycystic kidney)

NB: Ref these children to joint renal clinic

Suggestive of glomerular disorders

Nephritis

Nephrotic syndrome
U prot/creat ratio >3
Ref to joint renal clinic if persistent / unresponsive to treatment
Proteinuria

- 10% of 8-15 yr old children on routine dipstick
- 1% have persistent proteinuria
- Urine dipstick - measures albumin
- Semiquantitative
- Trace - 0.1-0.2/L
- 1+ - 0.30g/L
- 2+ - 1g/L
- 3+ - 3g/L
- 4+ - >20g/L
- False positive: Gross haematuria, antiseptics, alkaline ph, antibiotics, concentrated urine
- False negative: Dilute urine, proteins other than albumin
- If SG $\leq$ 1.015, consider 1+ as significant
- If SG $>$ 1.015, consider 2+ as significant
- More accurate methods
  a) 24hr urine protein
  b) Urine protein/creatinine ratio
     <0.5, <2yrs and <0.2, >2yrs

References

- The investigation of haematuria. R H White. Arch Dis Child, 1989, 64, 159-165