

Practice exam

SAQ 22

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Question 22

A 22 month old previously well boy presents to your tertiary Emergency Department.

He has a one week history of periorbital oedema and bilateral leg swelling.

He has had no fever and no recent illnesses.

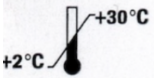
On examination he has normal vital signs.

Describe the urine dipstick giving

- three (3) positive and
- three (3) relevant negative findings.



IVD



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LOT

Specific Gravity Densidad Densidade 60 sec/seg.							
pH 60 sec/seg.							
Leukocytes Leucocitos 60-120 sec/seg.	neg.	ca. 15	ca. 75	ca. 125	ca. 500	Leuko/ μ L	
Blood/Hemoglobin/ Sang(re)(ue)/Hemoglobina 60 sec/seg.	neg.						ca. 50 ca. 250 Ery/ μ L
Nitrite/Nitrito/Nitritos 60 sec/seg.	neg.	+	++				
Ketones/ C.Cetónicos 60 sec/seg.	neg.					mg/dL (mmol/L)	
Bilirubin/Bilirrubina/ 60 sec/seg.	neg.	+	++	+++			
Urobilinogen(o)/ Urobilinogênio 60 sec/seg.	normal	1 (17)	4 (70)	8 (140)	12 (200)	mg/dL (μ mol/L)	
Protein/Proteínas/ Proteínas 60 sec/seg.	neg.	15 (0.15)	30 (0.3)	100 (1)	300 (3)	1000 (10)	mg/dL (g/L)
Glucose/Glucosa/ Glucose 60 sec/seg.	normal	100 (5.5)	300 (17)	1000 (55)			mg/dL (mmol/L)



Urine Dip Stick result :



3 positive findings

- Haematuria (marked)
- Proteinuria (marked)
- Slightly acidic urine pH6.5

Other positives?

3 negative findings

- No evidence of infection (no nitrites, no leuks)
- No evidence jaundice (ie hepato-renal syndrome) ie no Bili/Urobili
- No evidence of diabetes/DKA- no glucose or ketones
- Not overly concentrated urine ?

Most likely Diagnosis

- Glomerulonephritis
- (Nephritis vs nephrotic)

3 underlying causes for GN

- IgA GN
- Post strep GN (>2yo)
- Vasculitis - eg HSP (>6yo), PAN
- Connective tissue disorder - SLE
- Genetic - young
- Urine infection
- Membranoproliferative GN
- Drugs/toxins

Four complications

- Fluid overload - oedema /CCF
- Hypertension - seizures/encephalopathy
- Renal failure
- Lethargy/fatigue
- Hyperkalaemia/hyponatraemia

Remember

- Read the stem carefully
- Keep answers relevant to age group
- Answer ALL sections
- Have broad differential diagnoses
- Try to value add
(within the time allowed/points allocated)