



# Hematuria & Proteinuria in Children

CAROLINE STRAATMANN, MD, FAAP

AUG 19, 2022

## TYPES OF HEMATURIA

- **GROSS** - RED OR BROWN
  - ← FOOD CAN CAUSE
- **MICROSCOPIC** - > 3-5 RBCs/HPF
  - ← TRANSIENT OR PERSISTENT

REPEAT UA 2x OVER 1-2 WKS

↑ NORMAL BY 3RD TEST

MOST OFTEN SPONTANEOUS

REPEAT BEFORE REFER!

MORE OFTEN IN GIRLS

IF BOWEL NOT HAPPY, BLADDER NOT HAPPY (AND VISA VERSA)



## HYPERCALCAIURIA

↑ DON'T LIMIT CALCIUM



## GLOMERULAR HEMATURIA

• THIN BASEMENT MEMBRANE DISEASE

↑ BENIGN BUT NOT ALWAYS

• ASYMPTOMATIC → ISOLATE IT!

## HEMATURIA CAUSES

- UTI
- TRAUMA
- PERINEAL IRRITATION

TYPICALLY, WE DON'T FIND A CAUSE...



## POST INFECTIOUS GLOMERULONEPHRITIS

## IGA NEPHROPATHY

• MOST OF THE TIME, IDIOPATHIC

## PROTEINURIA

BEST - 24 HR URINE COLLECTION  
< 0.2 mg/mg = normal

LOOK AT SPECIFIC GRAVITY

- FALSE POSITIVE COMMON
- TRANSIENT COMMON
- PERSISTENT = COULD BE RENAL DISEASE

HEMA + PROTEIN = RENAL DISEASE  
≥ 1+ protein = POSITIVE