

Hematuria—Child

Hematuria (https://www.radiologyinfo.org/en/info/hematuria) is blood in urine. The urine may be red or pink, which is called macroscopic hematuria, or the urine may be normal in color but show blood cells when examined under a microscope, which is called microscopic hematuria. When a child with hematuria is examined, the doctor will usually test the urine for both blood and protein. Protein in the urine is called proteinuria.

If the child has microscopic hematuria without pain and no protein in the urine, then imaging is not recommended.

Ultrasound (US) (https://www.radiologyinfo.org/en/info/abdominus) of the kidneys and bladder is appropriate for microscopic hematuria without pain and when protein is found in the urine to check for kidney disease. US can also be used to plan for a kidney biopsy, if needed.

US of the kidneys and bladder is appropriate for macroscopic hematuria without pain to look for tumors in the kidneys or bladder.

CT (https://www.radiologyinfo.org/en/info/abdominct) is useful for painful hematuria to look for stones in the urinary tract (urolithiasis). US and x-ray may also be appropriate but may not see the kidney stones (https://www.radiologyinfo.org/en/info/stones-renal).

If microscopic or macroscopic hematuria occurs after injury (traumatic hematuria), the recommendation is CT of the abdomen and pelvis to look for kidney or bladder injury and pelvic bone fractures. Retrograde urethrography or CT of the pelvis with bladder contrast may be appropriate when injury to the urethra or bladder is suspected. US is usually not recommended for macroscopic hematuria after an injury but may be helpful when the hematuria is microscopic.

For more information, see the Hematuria page (https://www.radiologyinfo.org/en/info/hematuria).

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