

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>) .

— By Celena Romero, PhD, MBA, RDN, CPHQ, CPASRM and Ryan K. Lee, MD, MBA. This information originally appeared in the *Journal of the American College of Radiology*.

Disclaimer

This information is copied from the RadiologyInfo Web site (<http://www.radiologyinfo.org>) which is dedicated to providing the highest quality information. To ensure that, each section is reviewed by a physician with expertise in the area presented. All information contained in the Web site is further reviewed by an ACR (American College of Radiology) - RSNA (Radiological Society of North America) committee, comprising physicians with expertise in several radiologic areas.

However, it is not possible to assure that this Web site contains complete, up-to-date information on any particular subject. Therefore, ACR and RSNA make no representations or warranties about the suitability of this information for use for any particular purpose. All information is provided "as is" without express or implied warranty.

Please visit the RadiologyInfo Web site at <http://www.radiologyinfo.org> to view or download the latest information.

Note: Images may be shown for illustrative purposes. Do not attempt to draw conclusions or make diagnoses by comparing these images to other medical images, particularly your own. Only qualified physicians should interpret images; the radiologist is the physician expert trained in medical imaging.

Copyright

This material is copyrighted by either the Radiological Society of North America (RSNA), 820 Jorie Boulevard, Oak Brook, IL 60523-2251 or the American College of Radiology (ACR), 1891 Preston White Drive, Reston, VA 20191-4397. Commercial reproduction or multiple distribution by any traditional or electronically based reproduction/publication method is prohibited.

