

**NEPHROLOGY - I****APPROACH TO HEMATURIA**

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**Abstract:** Hematuria is defined as the presence of five or more red blood cells (RBCs) per high-power field of view ( $\times 40$ ) on microscopic examination. There are many causes of hematuria and the differential diagnosis depends on whether it is glomerular or non-glomerular in origin. Clinical presentation and urine microscopy can differentiate glomerular from non-glomerular causes. Rarer causes of hematuria may need more detailed evaluation with a renal biopsy, phase-contrast microscopy and other modalities. The common causes of hematuria and basic approaches to its diagnosis are discussed in this review.

**Keywords:** Urine microscopy, Hematuria, Red blood cells.

**Points to Remember**

- *It is mandatory to determine the origin of hematuria whether it is glomerular or non-glomerular.*
- *A detailed history, careful physical examination, and focussed laboratory investigations are essential in the work up.*
- *The presence of hypertension and proteinuria should prompt investigation for glomerular involvement.*
- *An early and accurate diagnosis in children with familial hematuria provides important information regarding the plan of management and possible need for intervention.*
- *Genetic counselling plays an important role in familial forms of hematuria.*

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