

The clinical significance of asymptomatic gross and microscopic hematuria in children.

Bergstein J - *Arch Pediatr Adolesc Med* - 01-APR-2005; 159(4): 353-5

From NIH/NLM MEDLINE

NLM Citation ID:

15809388 (PubMed)

Comment:

- *Arch Pediatr Adolesc Med*. 2005 Apr;159(4):398-9
PubMed ID: 15809399

Full Source Title:

Archives of Pediatrics and Adolescent Medicine

Publication Type:

Journal Article

Language:

English

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Abstract:

BACKGROUND: The development of asymptomatic gross or microscopic hematuria is relatively common in children. **OBJECTIVE:** To evaluate the clinical importance of hematuria in children and the necessity for such an evaluation using a defined diagnostic protocol. **DESIGN:** The protocol included a personal and family history, physical examination and blood pressure determination, and a set of comprehensive laboratory and radiological examinations. **RESULTS:** Of 342 children with microscopic hematuria, no cause was uncovered in 274 patients. The most common cause discovered was hypercalciuria (16%), followed by post-streptococcal glomerulonephritis (1%). Of 228 children with **gross hematuria**, no cause was uncovered in 86 patients. The most common cause discovered was hypercalciuria (22%). Ten patients had clinically important structural abnormalities. Fifty-three patients

qualified for renal biopsy; 36 had IgA nephropathy. **CONCLUSIONS:** Our results suggest that diagnostic evaluation for potential causes of asymptomatic microscopic hematuria in children may not be necessary. Because microscopic hematuria can, rarely, be the first sign of occult renal disease, long-term follow-up is mandatory. As clinically important abnormalities of the urinary tract are commonly discovered in children with asymptomatic **gross hematuria**, a thorough diagnostic evaluation is warranted.

Major Subjects:

- Hematuria / * etiology

Additional Subjects:

- Adolescent
- Adult
- Calcium / urine
- **Child**
- **Child**, Preschool
- Female
- Glomerulonephritis / complications
- Humans
- Infant
- Male
- Prospective Studies
- Streptococcal Infections / complications

Chemical Compound Name:

7440-70-2(Calcium)