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#### **Usefulness of urinalysis in primary health care**

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**Background and Aim:** The urinalysis is a non-invasive and a low-cost test commonly used in primary health care and it is an essential part of the diagnostic evaluation of many urinary, nephrologic and metabolic diseases.

This review aims to assess the recommendations for the use of the urinalysis in general practice and the interpretation of its most frequent findings, including hematuria and proteinuria.

**Method:** A literature analysis was conducted, using the following databases: PubMed, Medscape, Uptodate and the Cochrane Library. Papers were included if they were written in Portuguese, English or Spanish. The final search was performed in December 2015.

**Results:** Urinalysis includes an amount of tests that characterize a urine sample and measure its various compounds. These tests combine the evaluation of physical characteristics (color and clarity), biochemical parameters (urine pH, density and presence of blood, glucose, nitrites, ketones, bilirubin, urobilinogen, and protein) and microscopic sediment evaluation (red blood cells, leucocytes, epithelial cells, organisms, crystals and casts). The urinalysis has a significant diagnostic value in urinary tract infection. Clinical suspicion of renal lithiasis, glomerular diseases and certain metabolic disorders can be supported by specific findings in urine tests. The sediment evaluation can also differentiate glomerular from non-glomerular hematuria. Urinalysis parameters must be evaluated in combination with clinical symptoms, physical examination and other laboratory tests. Its accuracy is influenced by collection method and it is essential to interpret accordingly.

**Conclusions:** Urinalysis is an important tool in the diagnostic assessment of a variety of diseases and it should be interpreted in each clinical context. Despite the utility of the urine tests, there is no evidence of its role in the approach of asymptomatic patients and therefore the prescription of urinalyses in routine medical exams is not recommended.