

INCIDENCE OF ABNORMALITIES OF URINARY DIPSTICK TESTS IN PATIENTS RECEIVING BIOTHERAPIES



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BACKGROUND

Biotherapies are mostly used in the treatment of chronic inflammatory rheumatism, such as rheumatoid arthritis, ankylosing spondylitis and psoriatic arthritis. Because they expose patients to a higher risk of infection, a urinary dipstick test (UDT) is performed in all patients who receive biotherapies.

PURPOSE

The aim of this study was to evaluate the relevance of systematically performing a UDT in patients in the rheumatology day hospitalisation unit.

MATERIALS AND METHODS

A UDT was done for each patient during hospitalization. When they were positive (positive nitrites and/or leukocytes strong), a cytobacteriological examination of urine (CBEU) was performed as well as a summary of clinical information.

RESULTS

553 UDT were performed in 354 patients over 2 months. Median age of the patients was 56 years and 66% were female.

From the 553 UDT performed, only 15 (3%) were positive:

- 10 UDT had only strong leukocytes
- 5 had only positive nitrites.

3 positive UDT did not lead to a CBEU:

- 2 of them did not show any clinical signs and biotherapies were injected.
- The third patient was already septic on arrival and was receiving antibiotics.

Of the 12 CBEU performed, 6 showed significant bacteriuria:

- 5 positive for *Escherichia coli*
- 1 for Enterococcus faecalis.

354 Patients 553 UDT realized **Positive UDT** Négative UDT 538 Positive CBEU **Negative CBEU** No CBEU Asymptomatic Pyelonephritis Cystitis bacteriuria Antibiotic Antibiotic **No** antibiotic Antibiotic treatment treatment treatment treatment and + Biotherapy and no no biotherapy but Biotherapy (Bélimumab) biotherapy

Among these 6 patients, all females: 3 had asymptomatic bacteriuria and received their biotherapy and 3 were symptomatic. 2 patients were diagnosed with cystitis and pyelonephritis was discovered in a third patient. All were treated with an appropriate dose of ofloxacin. Only the patient with pyelonephritis did not receive biotherapy; for the other 2, the injection was delayed.

CONCLUSION:

Given the low frequency of abnormalities in the UDT, the therapeutic approach was modified in 3 cases and each time patients showed clinical signs. According to the literature, the risk of infection is higher during the first 6 months of treatment with biotherapies: 2 of the 3 patients had started their biotherapy less than a year before the onset of the urinary tract infection. Examination and clinical review should remain the primary elements in the diagnosis of a possible UTI and the therapeutic decision making.