

DISEASE-FREE TIME IN RECURRENT URINARY TRACT INFECTIONS WITH SUBLINGUAL IMMUNO-ACTIVE VACCINE DURING THREE MONTHS TOWARDS CONTINUOUS ORAL ANTIBIOTICS.

Hypothesis / aims of study

To determine the disease-free time in recurrent urinary tract infections (RUTI) with sublingual immuno-active vaccine during 3 months towards continuous oral antibiotics.

Study design, materials and methods

521 women diagnosed of RUTI between March 2003 and January 2013 were successively randomised in two treatment groups:

- Group A (n=273): Women with RUTI treated with sublingual bacterial tetravalent vaccine during 3 months (Uromune®);
- Group B (n=248): Women with RUTI treated with conventional continuous oral antibiotic (trimetoprim/sulfametoxazol 40/200 mg once daily or Nitrofurantoin 50 mg once daily during 6 months).

Controls were performed after 6, 12 months and yearly successively. Age, evolution time of the UTI, secondary diagnoses, concurrent treatments, number of UTI appearing after the preventive pattern in both groups and disease-free time in each group were investigated. In Group B, both antibiotic treatment patterns and their results were differentiated.

Descriptive statistics, ANOVA, Student's t-test, Fischer's exact test; $p < 0.05$ was considered significant.

Results

Homogeneous age ($p=0.7926$), median 42.61 years (range 17-71). Median evolution time of the RUTI was 25 months (range 8-108 months) without differences between groups ($p=0.9812$). There were no differences between groups regarding the most frequent concurrent treatments and secondary diagnoses (anxiety, depression, HTN, DM, arthritis, hypothyroidism) ($p=0.2175$). Disease-free time in Group A (average 14 months, range 8-24 months) was longer than in Group B (average 4 months, range 0.3-12 months) ($p=0.0002$), without differences between trimetoprim/sulfametoxazol and nitrofurantoin ($p=0.8172$).

Interpretation of results

The European Association of Urology encourages the scientific societies to find alternatives to antibiotics in the treatment of RUTI in order to defeat microbial resistances. Polivalent bacterial vaccines are immuno-active substances which are of a great benefit for patients, with a much longer disease-free time comparing with long-term suppressing antibiotics patterns. Wider and longer studies will give more accuracy on the time to give the booster shot in these immuno-modulators.

Concluding message

The first-line therapy in RUTI is the immuno-modulators or polivalent bacterial vaccines, which do not have any secondary effects or contraindications, towards long-term conventional oral antibiotics.

Disclosures

Funding: None **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Ethics Committee of the University Hospital of Salamanca **Helsinki:** Yes **Informed Consent:** Yes