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USEFULNESS OF THE POLYVALENT BACTERIAL VACCINE IN RECURRENT URINARY TRACT INFECTIONS IN ALLERGIC WOMEN

Hypothesis / aims of study

To investigate the influence of the allergies of several kinds in the response of women with recurrent urinary tract infections (RUTI) to the bacterial immunostimulants.

Study design, materials and methods

Retrospective multicentric study of a sample of 360 women with RUTI treated between September-2009 and December-2013 with the bacterial immunostimulant (vaccine) Uromune ®. Controls before the treatment and then at one, 3 and 12 months and yearly afterwards.

Group GA (n= 285): non-allergic women.

Group GB (n=75): women with allergies.

Exclusion factors: urinary incontinence \geq grade 2, cistocele, urinary lithiasis, neurogenic bladder.

Variables: Allergies to drugs or other substances, number of previous UTI; answer to the SF-36 quality-of-life questionnaire; disease-free time (DFT) in days.

Results

Average age 55.58y (17-85), similar in both groups ($p=0.6241$). No differences in the number of previous UTI ($p=0.4152$) nor in the bacterial type ($p=0.2181$).

GB: 26.09% antibiotic allergy (most frequent penicillin and derivatives), 39.13% allergy to other drugs (NSAID, pirazolones, anesthetics, corticoids, tiethylperazine), 34.78% to other substances (iodine, latex, pollen, nickel, surgical tape, fish, animal hair, perfumes). Average DFT in GB was 573.33 days, towards 279.6 in GA (significant difference; $p=0.02907$). Significant differences in the answers to the SF-36 questionnaire before and after the treatment ($p=0.0002$) in both groups.

Interpretation of results

Urinary tracts' are the second most common infections in humans. Non-antimicrobial strategies are under investigation, being the bacterial vaccines under rapid development.

Long term antibiotic consumption is not innocuous for the patient, and problems derived from the deleterious effects on the gut microbiota and/or the potential adverse events associated with its use is always a concern. In addition, the continuous use of antibiotics is associated with the widely increase of antimicrobial resistance to antibiotics creating a dramatic situation that demands a global challenge involving governments, health and economic organizations, among others, leading to the conclusion that the use of antibiotics as suppressive therapy or long-term prophylaxis may no longer be advisable.

Concluding message

We can achieve a good control of allergic women with recurrent urinary tract infections with the polyvalent bacterial vaccine, with a greater disease-free time than in non-allergic women. Investigations of the link innate vs acquired immunity may explain these findings.

References

1. Int Urogynecol J. 2013 Jan;24(1):127-34.

Disclosures

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