

RELATIONSHIP BETWEEN SECONDARY DIAGNOSES AND CLINICAL RESULTS AFTER MALE RE-ADJUSTABLE SLING IMPLANTATION FOR POST-PROSTATECTOMY INCONTINENCE

Hypothesis / aims of study

Given that the inflammatory reaction is an important step in synthetic sling incorporation after stress urinary incontinence surgery, even in post-prostatectomy incontinence (PPI), we aimed to study the effect of chronic inflammatory or autoimmune disorders in the results after implantation of an adjustable male sling.

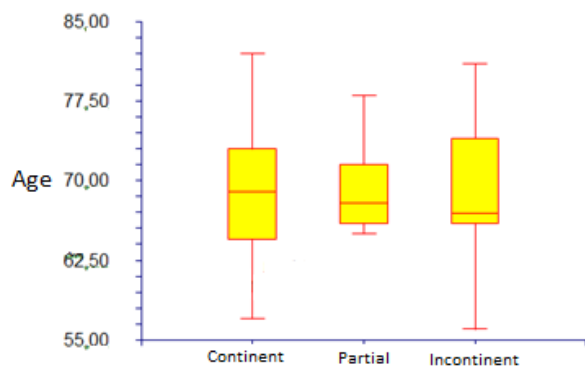
Study design, materials and methods

Retrospective study of 92 men who underwent implantation of an adjustable male sling (REMEEEX®, Neomedic, Spain) due to PPI. The sample was divided into 3 groups: Group A (n=60): patients who were totally continent after surgery; Group B (n=20): patients who were partially continent and needed readjustment; Group C (n=12): patients who were incontinent after surgery. Variables investigated: age, secondary diagnoses with special interest in autoimmune or chronic inflammatory disorders, physical examination, complementary studies, ICIQ-SF questionnaire.

Statistical analysis: descriptive statistics, ANOVA, Student's t-test, Fisher's exact test. $p < 0.05$ was considered statistically significant.

Results

Age was similar in the three groups as shown in figure 1 (average 69.02 years, range 56-82).



Complete continence was achieved in 65.21% of the patients. Table 1 shows the distribution of the most important secondary diagnoses in the three groups.

Secondary diagnoses	Continent n=60	Partially Continent n=20	Incontinent n=12	p (comparing continent and incontinent)
Diabetes	6	6	6	0.0033
-Type 1	2	2	3	0.0300
-Type 2	4	4	3	0.0853
Inflammatory bowel disease	-	-	2	0.0258
Rheumatic diseases	-	-	2	0.0258
Osteoarthritis	6	-	6	0.0033
Allergies	4	-	3	0.0853

Interpretation of results

It is hypothesized that biomaterials induce an acute inflammatory response, which leads to constructive remodelling and material integration, but when an excessive inflammatory reaction is given, patient's tissues and/or the synthetic material may be damaged, leading to a mechanical failure of native tissue erosion.

There was a high percentage of patients with immune and chronic inflammatory disorders in the group of patients who remained incontinent after PPI surgery, what may support this theory.

Concluding message

Male re-adjustable sling REMEEEX® achieves a 61.25% of continence in post-prostatectomy incontinence. A medical background with inflammation and immune disorders is more frequently found in patients with a worse response to treatment.

References

1. Biomed Res Int. 2015;2015:968087. doi: 10.1155/2015/968087

Disclosures

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