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A NOVEL TECHNIQUE FOR ONE-STAGE ANTERIOR PROLAPSE AND STRESS INCONTINENCE REPAIR WITH THE APPLICATION OF LABIAL FIBROADIPOSE FLAP (MARTIUS FLAP) - A PILOT STUDY IN 19 WOMEN –

Hypothesis / aims of study
Labial fibroadipose vascularized flap, also known as Martius flap, is a reliable autologous adjunct to primary or secondary vaginal reconstructive surgery. The current study aims at determining whether this tissue can be a reliable alternative to synthetic material in the treatment of anterior prolapse with coexisting stress urinary incontinence in women.

Study design, materials and methods
19 women 46-80 years old suffering from Grade II-III cystocele and genuine stress incontinence gave appropriate informed consent and were treated with the conventional anterior repair technique. A Martius flap was prepared from the left major labium and was longitudinally divided into two parts. The posterior part was interposed between the fascial stitches and the vaginal mucosa to enforce the anterior repair. The anterior part was anchored to the paraurethal fascia, to support effectively the middle-posterior urethra and the bladder neck. The continence status was evaluated with the ICIQ-SF questionnaire, clinical assessment and filling and voiding cystometry prior and six months after the operation. Statistical analysis was done with the Wilcoxon non-parametric test.

Results
Preoperative ICIQ-SF score ranged between 13-20 (median=17) while postoperative score was between 2-8 (median=5) ($p<0.001$). In the preoperative urodynamic evaluation stress incontinence was objectively demonstrable in all the patients either spontaneously or after cystocele reduction. Detrusor overactivity was present in 5 patients. At six months mild stress incontinence presented in 4 patients and no de-novo overactivity was found. All other urodynamic parameters did not change at a statistically significant degree. The vaginal wounds healed normally and no cystocele relapse was noticed. In the sexually active patients mild dyspareunia was reported in 2 cases.

Interpretation of results
It is widely accepted that the suburethral tension-free tapes restore long term continence rather by causing fibrosis of the paraurethral tissues and not by direct urethral support. In this concept we thought that autologous tissue would be the most appropriate material to support the posterior urethra and anterior prolapse repair. Moreover common complications like vaginal and bladder erosions could be avoided as Martius flap is an autologous, vascularised tissue segment that can easily be mobilized to the vaginal operating field and can sustain its supporting effect long enough for fibrous tissue to develop.

Concluding message
Our primary results are encouraging and if they stand long enough, labial fibroadipose flap could be a reliable alternative to synthetic material or xenografts in the treatment of anterior prolapse with stress incontinence. It can also prove to be a cost effective option in the current financial difficulties of many health systems .

References
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Is this a clinical trial?	**No**
What were the subjects in the study?	**HUMAN**
Was this study approved by an ethics committee?	**No**
This study did not require ethics committee approval because	**No new unaproved material or drug was used. All the steps of the procedure consist of well established and accepted manipulations that are applied at the same operating field and for similar indications and do not harm or cause irreversible damage to the patients**
Was the Declaration of Helsinki followed?	**Yes**
Was informed consent obtained from the patients?	**Yes**