Hypothesis / aims of study
Collagen injection is the only transurethral bulking procedure covered by our health system. We did a retrospective analysis of the results of transurethral collagen injections in patients with intrinsic sphincteric deficiency (ISD) after prostatic surgery (TUR-P or open prostatectomy).

Study design, materials and methods
Between January 2000 and December 2010, we performed 158 transurethral collagen instillation in males with ISD after prostatic surgery (70 after TUR P, 88 after open prostatectomy). The examination protocol included basic urologic evaluation, urodynamic evaluation and imaging. We included only the patients in which leakage was observed during our evaluation. We used GAX collagen, injected under spinal anesthesia. The injection was performed at 3, 6 and 9 o’clock, until complete (122 cases) or partial obstruction (36 cases) of the urethral lumina was obtained. The patients were reevaluated at 6 months or sooner, if the patient accused leakage.

Results
The mean collagen volume used was 21ml/patient (10 – 50ml). In 64.5% of the cases, we repeated the procedure (48 cases – one time, 52 cases – three or more times). After the first injection, 43% of the patients became dry and 34% had the same leakage. After the second injection, the rate of the dry patients grew to 58%. After 18 months, 31% of the patients are still dry. After 32 months, urinary continence is present in 29% of the patients and significant improvement is seen in 17% of the cases. The complications we encountered were: acute urinary retention (14%), overactive bladder (9%), UTI (4%), hematuria (2%), urethritis (1%).

Interpretation of results
GAX collagen proves efficient in about one third of cases, even if the procedure should be repeated after some time. In many cases, it is necessary to perform several procedures to obtain continence.

Concluding message
Transurethral collagen injection is a reasonable therapeutic option for the patients with ISD after prostatic surgery, and may be used until more effective treatments become available.

Specify source of funding or grant
None

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
retrospective study using standard urologic procedure

Was the Declaration of Helsinki followed?
Yes

Was informed consent obtained from the patients?
No