MACROPLASTIQUE IMPLANTATION SYSTEM: A NON-ENDOSCOPIC STANDARDIZED AND REPRODUCIBLE TECHNIQUE

Hypothesis / aims of study
The bulking agents are becoming an excellent minimally invasive alternative for the treatment of female stress incontinence (1), although the general thought is that urethra hypermobility could reduce the efficacy; this is not supported by the worldwide literature (2). Our aim is to show the standardized non-endoscopic technique of the Macroplastique Implantation System (MIS) in order to help it become a widespread, easy to learn and reproducible alternative.

Study design, materials and methods
Macroplastique ® is composed by polidimetilsiloxano particles suspended in polivinilpirrolidone hydrogel. It has been used for female stress incontinence since almost 9 years (1). These particles do not seem to migrate, once injected they tend to organize into firm nodules infiltrated by collagen and fibrous tissue surrounded after 6 to 8 weeks. The general idea of using bulking agents for the most complicated and severe type of stress incontinence (intrinsic esphincteric deficiency) is losing importance, actually nowadays there are some other indications that focus on the real benefit of bulking agents procedures, their minimally invasive nature, there we could mention:
- Nulliparity or incomplete parity
- Mixed urinary incontinence with predominant urgency symptoms
- Elderly patients
- Patient who do not can take a long post operatory recovery

Technique: The Macroplastique non-endoscopic Implantation System Device was desing in order to allow the transurethral injection into the periurethral area (at the 6, 10 and 2 hrs around the mid urethra) five to ten mm from the vesical neck, through each of its three ports localized at the 12, 4 and 8 hours of the external device’s surface.

Results
Most of the time the procedure could be done in approximately 15 minutes, under local anesthesia or sedation, no cistoscopy is needed, there are no or few light intraoperatory or post operatory complications as trasient first hours urinary retention or pain. The patient could be discharge the same day.

Interpretation of results
Bulking agents are the most minimally invasive surgery alternative for stress incontinence, they could be consider as an middle stage between pelvic floor muscle rehabilitation and slings procedures.(3)

Concluding message
The use of Macroplastique by a non-endoscopic standardized technique is easy to learn and reproducible, could be perform ambulatory with few and minors complications when present, and the results could be satisfactory when indicated properly.

References