MODELLING THE VAGINA SPACE: A NEW WAY TO STUDY PELVIC ANATOMY AND URINARY INCONTINENCE

Synopsis of Video

Aims of the study
The aim of this study is to describe a new method to approach the anatomy of the vagina.

Methods
We described a new method to evaluate the human vaginal anatomy. Ten women, mean age 57 y.o. (31 to 76 y.o.), all of them with indication of cystoscopy or stress urinary incontinence correction, and without cystocele or rectocele, took part in this study. Under spinal anesthesia, the patient was placed in litotomy position. A 50 per cent Alginate water solution was prepared and injected by pressure into vagina. Alginate is a material of large use in dentistry, with a high resolution index and low adverse reactions. Two minutes later, the mold was dry and ready to be removed from the vagina. There was no difficult in removing it intact. The mold was then imprinted in gypsum, to finally be manufactured in resin to be stored. A specular exam was performed in all patients after the mold was removed, to check the presence or not of possible small pieces of Alginate in the vagina and uterine meatus.

Results
Despite differences in size, vaginal shape is very similar in all patients. It has a triangular format, with a flattened antero-posterior way. The vaginal fundus was represented by the triangular base and the introitus by the apex. The uterine neck and vaginal pleats were as well printed in the mold.

Conclusions
The method we described, allows a fair reproduction of the real vaginal shape. The mold obtained by this method may be of great applicability in the study of the pelvic anatomy, pelvic prolapses and urinary incontinence.