

PELVIC DYSFUNCTION PATIENTS INSPECTION METHODS

Hypothesis / aims of study: to show a spectrum of possible and necessary methods of pelvic organ prolapse (POP) patients inspection.

Modern pelvic surgery complications associated with insufficient or superfluous operation techniques use. That is frequently connected with absence of optimum diagnostic algorithm, promoting in adequate treatment way choice.

Study design, materials and methods: In preoperative patient inspection before surgical POP correction with TVM modifications, paravaginal repair types, TVT-TOT procedures, Longo'STARR and so forth were applied described below methods.

Three-dimensional and dynamic endovaginal, endoanal, transperineal USI in rest and Valsalva show lower urinary tract conditions (urethrovesical angle, urethra hypermobility, cystocele form), visualized anal sphincters, anorectal angle, pubovisceral and perineal superficial muscles, perineal body, levator and urogenital hiatus, and paravaginal spaces.

Dynamic US methods provides puborectalis contraction and anorectal angle measurement.

3D US show m. levator ani and anal sphincters defects, perineal body deficiency, levator hiatus enlargement, pubocervical fascia lateral detachment to the arcus tendineus fascia pelvis.

The role of urodynamic tests (UT) is important too. Quite often changes revealed with Urodynamic tests, precede clinical incontinence signs. UT diagnosed latent incontinence forms expressed intraoperative. UT consist of uroflowmetry, cystometry in different phases, urethral profilometry. UT indications were primary inspection doubtful results, conservative treatment inefficiency, neurogenic dysuria probability, infravesical obstructions signs, severe POP stage. Defecation studying (defecography, evacuation proctography) was necessary in the presence of anal dysfunction complaints for rectocele, external/internal rectal prolapse, sigmocele estimation. Anal sphincter insufficiency predetermined sphincteromanometry carrying out. Signs of the expressed rectovaginal septum atrophy created indications to its prosthetics, obstacles to rectocele de novo development. Hemorrhoids, rectal prolapse signs were precondition to simultaneous operations.

Value in POP diagnostic standards gets static/dynamic MRI. Pelvic organs position is described according to the accepted Cartesian coordinates system [A.Summers, J.O.DeLancey]. Joint to US MRI defined pelvic fascia insufficiency (paravaginal, distal, median defects by Richardson). Important that for adequate understanding of cystocele mechanism and correction ways it is necessary to investigate anterior and apical departments prolapse.

Results: direct correlation of US, MRI revealed pelvic fascia defects with their intraoperative definition ($p < 0,001$). US results more than in 70 % coincided with UT results. And revealed urodynamic urine incontinence signs directly correlated with clinical one ($p < 0,001$). Dynamic US results in rectocele inspection comparable with those obtained in defecography. That allows to distinguish between different forms of posterior part prolapse (true rectocele, perineal hypermobility, enterocele).

Interpretation of results: direct correlation between basic inspection methods of pelvic dysfunction patients proves their continuity in given group effective research.

Concluding message: above described techniques in competent combination provide an individual approach to pelvic dysfunction patient, allowing to carry out pathogenetic POP correction and monitor treatment results.

Specify source of funding or grant	none
Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
Is this a Randomised Controlled Trial (RCT)?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	Local People's friendship university Ethics Committee
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes