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THE BENEFITS OF BIOFEEDBACK DURING ROUTINE UROGYNAECOLOGY CLINICS Aims of study

Pelvic floor reeducation programs often involve biofeedback-methods to increase pelvic floor awareness, tone and contraction [1]. It was the purpose of this study to introduce functional video-urethrocytoscopy as a new method of visual biofeedback and to compare immediate responses to three different biofeedback-methods during routine urogynaecological assessment.

Patients and method

Up to now thirty-five consecutive urinary incontinent women attending our urogynaecology clinic were asked which of the following three biofeedback-methods they found most beneficial regarding understanding of pelvic floor anatomy and function

- 1. Perineal ultrasound: visualisation of bladder neck at rest, Valsalva, contraction and coughing
- 2 Video-urethroscystoscopy. visualisation of bladder neck at rest, contraction and coughing
- 3. Digital assessment of pelvic floor tone and strength of contraction: sensory awareness and verbal feedback

The order of biofeedback-methods was randomised to avoid operant conditioning bias. The women completed the questionnaire after the examination in which the following question were obtained.

Which is the prefered method to gain awereness in:

- Anatomic location of the pelvic floor muscle (PFM) ?
- Functional understanding of the PFM to urethral closure ?
- Understanding the aims of physiotherapy ?

Author(s)

Results

The mean age was 55 years (24-86). Twenty-one women complained of stress incontinence, seven of urge incontinence and seven had mixed symptoms. Thirty--seven percent of women found that the awareness of the pelvic floor muscle was best accomplished by cystoscopy. Table 1 shows the patients preference of biofeedback-methods with respect to understanding of anatomy and function of pelvic floor muscle and its value for preparation of pelvic floor exercises.

Table 1: The women's preferences.

Which methods do you prefer regarding:	Digital biofeedback n (%)	Visual biofeedback		
		Perineal ultrasound n (%)	Video- Urethrocystoscopy n (%)	Indifferent n (%)
Anatomy	5 (14)	11 (31)	6 (17)	13 (37)
Function	2 (6)	10 (29) p=0,02 *	18 (51) p<0,001 *	5 (14)
Physiotherapy	4 (11)	10 (29)	13 (37) p=0,03 *	8 (23)

^{*} significantly different to digital biofeedback (Friedman test, post hoc Wilcoxon test)

Conclusion

Visual biofeedback-methods like cystoscopy and perineal ultrasound seem to be superior to digital feedback. Video-urethroscopy is an effective method to teach function of the pelvic floor this increase the spectrum of indications of urethrocystoscopy in female urinary incontinence.

Reference

1) BJU Int 1999; 83: 1015-1016.