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Classification and evaluation of prolapse

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Pelvic organ prolapse is prevalent among older women. Milder stages of prolapse, cranial to the hymen, are common and usually symptomless. A specific symptom is a bulge outside the vagina. Functional symptoms from the bladder, bowel and sexual life frequently coexist without a known cause/effect relationship to prolapse. Prolapse should be measured by the validated internationally approved pelvic organ prolapse quantification (POPQ) system that can measure prolapse in the three compartments and three levels of the vagina. We should work on a common classification system and agreement in which symptoms should be recorded as related to prolapse and expected to improve by prolapse surgery.

Keywords: pelvic organ prolapse; urinary incontinence; faecal incontinence; sexual problems.

'Without the names your knowledge about things disappears' (Carl Von Linné), and without a common classification system communication and learning become difficult. Pelvic organ prolapse (POP), urinary incontinence (UI) and faecal incontinence (FI) are common symptoms in the general female population. These symptoms appear to be associated, and all types often coexist in the same individual.[1–9]

Pelvic floor dysfunction, especially the end stage of POP, is found in postmenopausal older women. This section of the population is growing in industrialized countries.[10] Growth in demand for services to care for female pelvic floor disorders will also generate a demand for exactness in diagnosis and treatment options, as well as in scientific discussions, making communication even more important.

Classification of POP ought to be in accordance with anatomy and symptoms and ought to be easy to perform, teach and learn, as well as sensitive and specific to relevant changes in anatomy.

Evaluation of symptoms can be done by validated questionnaires. For epidemiological studies it is important that there is concordance between symptoms and anatomical findings, especially when symptoms associated with POP are so widespread in the older female population.

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PREVALENCE OF PELVIC ORGAN PROLAPSE

The prevalence and incidence of POP depends on the definition and study population.

POP is defined anatomically as the descent of a pelvic organ into or beyond the vagina, perineum or anal canal.[11] This definition may include up to half of the female population.[12,13] When POP is defined as a lump protruding outside the introitus, the prevalence declines to 2–12%[1,4,12–14], increasing with age. When functional symptoms from the lower urinary tract (LUTS), bowels, and sexual life are included, the relationship with anatomically defined POP is not so clearcut, and the chance of curing these symptoms by prolapse surgery is less promising.

The incidence of prolapse and incontinence surgery was reported in a retrospective cohort study. Lifetime risk of undergoing at least one surgery was 11.1%, and in two-third the indication for surgery was POP. The most discouraging finding in this study was that one-third of the women needed repeat surgery.[9]

The 'natural history' of POP anatomy was studied during a 2–8-year period. The annual incidence of cystocoele, rectocoele, and uterine prolapse was 9.3, 5.7, and 1.5 cases per 100 women-years[15,16], and the annual rates of regression were 23.5, 22, and 48, respectively. It was concluded that pelvic organ prolapse is not always chronic and progressive, as traditionally thought.[16] Studies of pregnant women also revealed that POP in younger women could be a dynamic, asymptomatic, partly reversible adaptation to pregnancy and delivery.[17,18]

AETIOLOGY

From epidemiological studies, there is grade III–IV evidence that development and recurrence of POP are related to previous prolapse surgery[9], previous colposuspension[19,20], hysterectomy[12,15,21,22], obesity[15], old age[1,15,21], constipation and chronic straining during defaecation[23], a weak pelvic floor muscle function[13], parity (especially multiparity and complicated vaginal deliveries)[21,23], heavy lifting at work[24], large diameter of the bony pelvis[25,26], collagen abnormalities[23,27], and probably the menopause and decreased oestrogen level.[28,29]

The aetiology of POP is multifactorial. Some surgical risk factors may be prevented by surgical techniques that do not change vaginal contour and suspending ligaments.[20,30,31]

ANATOMY

Any classification system—whether designed for clinical examination or imaging—should describe anatomy. The present concept of the female pelvic support divides it into three compartments: the *anterior compartment* with the urethra and bladder, the *posterior compartment* with the anus and rectum, and the *middle* containing the vagina and uterus or vault in hysterectomized women. The suspension system can be divided into three levels (Figure 1).

- *Level I:* the cranial part of the vagina and uterus or vault is suspended by the sacrouterine and cardinal ligaments.[32,33] Prolapse of Level I is therefore either uterine or vault prolapse.