1.6
Pelvic Organ Prolapse

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Key Messages

In this chapter, the prevalence of prolapse and the causative factors are reviewed. Important features of the clinical examination are described, and the objective Pelvic Organ Prolapse Quantification (POP-Q) and Schüssler Quantitative systems of clinical examination are illustrated and explained.

Introduction

Pelvic organ prolapse is a common clinical entity that may affect 1 in 3 women, where the pelvic structures lose their support and descend to and beyond the vaginal introitus. In the United States, it accounts for 3 times as many surgical procedures as stress urinary incontinence, despite the fact that much of the condition is managed without surgery. The number of women who seek treatment for pelvic floor disorders is expected to increase by approximately 50% in the near future.

Clinical Findings

Pelvic organ prolapse includes defects of the anterior vaginal wall (cystocele), vaginal apex (uterine prolapse, vaginal vault prolapse, and enterocele), and posterior vaginal wall (rectocele and enterocele). The major symptoms associated with POP include a sensation of fullness, pressure, bulging, or a lump in the vagina or at the introitus. Patients report difficulties with voiding or defecation, which is sometimes relieved by splinting with a finger or thumb to effect emptying, lower back pain, which improves after lying down, and dyspareunia. Unlike urinary and fecal incontinence, POP is difficult to assess in study populations by symptom questionnaire; this means that for epidemiological or outcome research into POP an examination is the only way to assess whether a woman has the condition or not. Two quality of life instruments specific to POP have been described; although these instruments correlate with physical findings in women with POP presenting for evaluation, they have not been validated as outcome measures or as population screening tools.

Etiology and Risk Factors

Similar to other pelvic floor disorders, the etiology of POP is multifactorial. The biggest risk factor remains childbirth injury, but contributing factors include conditions of chronic increased intraabdominal pressure: chronic pulmonary disease (asthma, COPD), chronic constipation, obesity, and occupations involving heavy lifting. The natural history of POP remains to be described; it is known that some women have significant levels of pelvic organ descent without symptoms, and that some women have identifiable defects that do not progress over many years of observation. Several large-scale studies have included a physical assessment for POP with some surprising findings; 30% of parous women in the Heart and Estrogen/Progestin Replacement study had a cystocele to within 1 cm of the hymenal ring, and of these, only 30% were symptomatic. Thus, an anatomical finding of descent
from "normal" pelvic support may have no clinical significance unless the woman has associated symptoms.

**Examination**

A vaginal examination with a speculum is necessary for the evaluation of POP. A bivalve Graves or a Sims speculum is used to identify the cervix or vaginal cuff after hysterectomy, and is withdrawn while the woman bears down until the point of maximum descent is reached (i.e., the cervix or cuff descends no further). All distances are measured in centimeters relative to the hymenal ring, the remnants of which can be identified in all women. Although the vaginal apex (cervix or cuff) is optimally found at 8–10 cm above the hymenal ring, there can be considerable descent toward the hymen without symptoms. The posterior vaginal wall is retracted with a Sims speculum or the posterior half of a Graves speculum, while watching the anterior wall descend to its maximum point, and is used again to retract the anterior wall while watching the posterior wall descend. Finally, the genital hiatus (distance from midurethra to posterior fourchette) and perineal body (distance from posterior fourchette to midanal opening) are measured. All measurements are taken with the patient while straining/Valsalva; examining a patient in the supine lithotomy position demonstrates less prolapse than examining in a birthing chair at a 45 degree sitting position or in the standing position. Some clinicians examine in the supine position as well if the supine or sitting positions fail to reproduce the woman’s symptoms of bulging.

The International Continence Society devised the POP-Q system in 1994 in an effort to standardize the measurement of POP. The system records two points in the anterior wall, two points in the posterior wall, one to two points in the apex, total vaginal length, and the measurements of the genital hiatus and perineal body (Fig. 1.6.1). The leading edge of the prolapse defines the overall stage, with stage II being defined as the leading edge being within 1 cm of the hymenal ring (above or below), stage IV being complete eversion of the vagina, stage III being prolapse greater than stage II but not complete eversion, stage O being no prolapse, and stage I being prolapse less than stage II (not to within 1 cm of the hymenal ring.) Although some specialist gynecologists would prefer a system with more detail that includes vaginal capacity, bladder neck mobility, and the presence of a lateral wall defect, the POP-Q system may be too detailed for other clinicians. One useful modification is the Schüessler diagram (Fig. 1.6.2), devised by Schüssler as part of the original POP-Q system.

In this diagram, the vagina is represented diagrammatically with an obtuse representation of the introitus, and an outline of the leading edge of the prolapse with including measurements. Unless precise measurements are needed for research purposes, the measurements for prolapse, including a Schüessler diagram, should take no more than a few minutes.