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Review Article

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Diagnosis of Cystocele by Clinical Examination a New Technique, the De Alwis Positions

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Abstract

Objectives: *To diagnose the cystocele and compare with the standard methods of the past.*

Methods: *Over a period of ten years, the cystocele was examined in the supine position, the left lateral position and the De Alwis positions, purely as clinical methods of examination.*

Conclusion: *The findings were that the supine and left lateral positions, displayed the cystocele adequately, but the De Alwis technique gave a better assessment of the descent of the bladder, the cervix and the rectocele, that could be measured in relation to the inferior border of the pubic bone, instead of the hymenal ring which was mobile and not suitable to be considered for accurate measurements.*

Introduction

The cystocele is a prolapse of the anterior vaginal wall with the herniation of the bladder seen as a bulge arising from the anterior vaginal wall [1].

The international continence society (ICS) defines, anterior vaginal wall prolapse (cystecele), as the descent of the anterior vaginal, wall such that the urethrovesical junction (a point 3 cm from the external urethral meatus) or any anterior point proximal to this, is <3 cm above the plane of the hymen [2].

The cystocele can result due to the weakness of the pubo-cervical fascia between the bladder and the vagina [3]. This method of measurement involves the position of the urethra-vesical junction and descent of the anterior vaginal wall. There can be errors in the assessment, since minor forms of descent can be regarded as normal [4, 5].

The prolapse quantification system of the international society (ICS) is generally regarded as the gold standard for the assessment of prolapse. However, the measurements use soft tissues, which are mobile such as the hymen and not fixed, while measurements from the inferior aspect of the pubic symphysis is a fixed position. Ultra-sound and MRI have been used in the assessment of Vulvo-vaginal prolapse ϕ in the recent years, although clinical examination aided by speculum examinations, were the gold standards for decades.

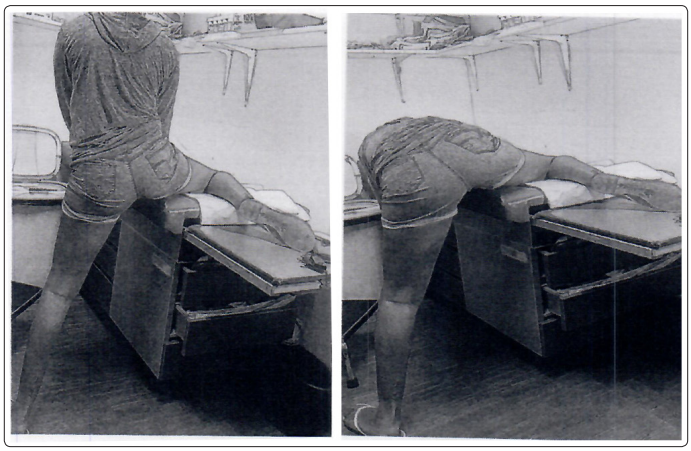
In order to examine a hernia it should be performed, in both supine and standing positions, with and without the Valsalva maneuver. The hernia sac can be measured manually and by ultra-sound. In the case of the cystocele, cystourethrocele, rectocele and enterocyte, clinical examination and ultra-sound examination are helpful. Green proposed the radiological classification of cystoceles, based on the descent of the bladder neck, retroversical angle (being the angle between the proximal urethra and the trigone of the bladder) and the degree of ureteral rotation. Open retro vesical angle being (>140 degree) and uretheral rotation (<45 degree) being green type I. Open retro vesical angle (>140 degree) and uretheral rotation between 45 and 120 degree, being cysto-urethrocele. Green type III is a cystocele with intact retrovesical angle <140 degree) [6-8].

Assessment of prolapse, the cystocele, rectocele, the enterocyte are difficult to reproduce by different people even on the same patient. This is due to the fact that the tissues involved varie, depending on various factors. First, the tissues measured are soft tissues, which are best assessed in the standing position, as in the case of routine abdominal hernia assessment.

The assessment of inguinal hernias and prolapses of the vagina and the pelvic structures, were found by us to be more successful in the De Alwis positions, than the standing, sitting, left lateral or lithotomy positions.

The patient stands on a stool if needed and the patient's knee is bent (see photographs) and the thigh and knee rested on the bed, with or

without a pillow to rest the knee. The examiner seated on a short, can assess the descent of the vaginal structures from behind and front while obliterating the rectocele with the syms speculum. In position 2, the patient leans forward and with the Sym's speculum obliterating the rectocele, the enterocyte is visualized easily.



The right inguinal hernia is assessed with the left knee resting on the bad and vice versa, in position (1), examined from the front of patient. Rectal examination, assessment of the rectocele and the perinial body is best found in the De Alwis (2) position, with the chest resting on the bed and the patient leaning over the bed. In this position the cystocele, rectocele, enterocele, descent of the uterus and the cough test to demonstrate urinary incontinence, could be assessed comfortably.

Imaging techniques have been used for the assessment of various degrees of prolapse, using ultra-sound and MRI, with much success. Radilogical assessment using cysto-urethrographic has gone out of fashion. Cysto-urethrometry is still of great value in assessing the pressures and to diagnose detrusor instability but does little to assess prolapse. Ultra-sound appears useful to assess the bladder neck descent, the recto-vesical angle and the degree of cystocele descent.

The cystourethrcele is common with levator ani trauma, childbirth injuries, causing utero¬vaginal prolapse, recurrence of prolapse and perineal body trauma. All these assessments due to actual measurement of the size of the perineal body, was easily accomplished in the De Alwis position (2) with the patient's upper body bending over the bed (see photograph).

The position of the patient, i.e. standing, lithotomy or De Alwis position; the extent of urine in the bladder, the valsalva maneuver and other factors contribute to the differences in the POP-Q staging of cystocele. The aim of this study however, was to assess the more accurate, the more patient friendly and the more reproducible method of assessing prolapse of pelvic structures, in relation to the solid inferior border of the pubic symphysis as opposed to the mobile hymenal ring.

Conclusion

Our clinical findings show that the De Alwis positions were more suitable methods for assessment and measurement of descent of pelvic structures, in relation to the firm inferior border of the pubic symphysis.

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