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Editorial

Sacrospinous ligament fixation

Pelvic organ prolapse (POP) and its consequences have been reported since 2000 BC. Hippocrates described numerous nonsurgical treatments for pelvic organ prolapse. In 98 CE, Soranus of Rome first described the removal of the prolapsed uterus when it became black.

Recommendations "to correct a displaced womb" were described in the Ebers Papyrus. Hippocrates described pomegranate pessaries to reduce POP. Succussion (tying a woman upside down by her feet until the prolapse reduced) was also described. Leonardo Da Vinci (1452-1519) contributed to texts following extensive cadaveric pelvic dissection. Andrea Vesalius described the entire female genital tract and uterine ligaments. By the end of the 16th century, pessaries were being widely used, evolving from lint balls to those made of brass, cork, wood or metal, then rubber in 1844. During the later half of the 19th century dramatic advances occurred in surgical instruments. James Sims popularized the use of silver sutures in pelvic repair surgery in 1852. The first vaginal hysterectomy for POP was reported by Choppin, of New Orleans, in 1861. Alwin Mackendrot described the pelvic connective tissue including cardinal ligaments in 1895.

Two major shifts have occurred in POP surgery: introduction of vaginal mesh and advanced endoscopic surgery. Graft use in pelvic reconstructive surgery can be traced back to the early 1900s. Over the intervening years, a number of auto-, allo-, and xenografts have been used. Abdominal sacrocolpopexy, is now achievable via laparoscopic or robotic.

Sacrospinous colpopexy, introduced by Randall and Nichols [1] in 1971, has become a favored method for restoring vaginal support in women with vault prolapse, massive eversion of the vagina and procidentia. Defects in apical vaginal support are crucial to recognize and address when undertaking surgery for prolapse. The upper third of the vagina (level I) is suspended from the pelvic walls by vertical fibers of the paracolpium, which is a continuation of the cardinal ligament.[2] The uterosacral and sacrospinous ligament suspension seek to restore the level 1 vaginal support. The age-specific incidence increased with advancing age[3] and thus better surgical techniques are required. Transvaginal sacrospinous ligament fixation technique is used as part of the vaginal repair procedure for marked uterovaginal prolapse and vault prolapse. Injury to the pudendal nerve, internal pudendal artery and vein, ureter and rectum is a possible complication.[4] Exposure and direct visualization of the sacrospinous ligament coccygeus muscle complex require adequate dissection of the pararectal space, avoiding injury to the rectum. Injury to the pudendal nerve and the internal pudendal vessels is avoided by placing the fixation suture minimally 1.5 cm medial to the ischial spine. Vaginal prolapse is associated with weakness of pelvic floor due to childbirth and postmenopausal atrophy. The upper vagina is suspended in the pelvis by the caudal portion of the cardinal uterosacral ligament complex. These ligaments attach the cervix and upper vagina to the pelvic wall in the area of the greater sciatic foramen. When these suspensory fibers are damaged, the cervix, upper vagina prolapses downward away from the greater sciatic foramen, and fall below the normal position at the level of the ischial spine. Women who have undergone hysterectomy and in whom the suspensory apparatus was not reconstructed are at increased risk for vaginal eversion.[5]

The true incidence of vaginal vault prolapse following hysterectomy is approximately 0.5 percent of patients.[6] Numerous operative techniques are described for the correction of vaginal prolapse.[7] Fixation of the vaginal apex to the sacrospinous ligament has many advantages. By using a transvaginal approach, the incumbent potential complications of laparotomy are avoided and hospital stay as well as recovery to normal activity is shortened as well as maintanance of sexual potency.[8] This increases the quality of life.

In order to popularize the sacrospinous ligament fixation faculty development program should be initiated by the OGSB and OB/GYN department. Workshop

should be conducted so that all the faculties become well acquainted with the techniques of the operation.Regular audit should be carried out to see the efficacy of the program.

Prof. Iffat Ara
Professor of Gynae & Obs
Popular Medical College, Dhaka

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