GENITAL TRACT PROLAPSE
Definition
Genital tract prolapse is defined as herniation of the pelvic organs through the vaginal wall and/or descent of uterus through the vagina.
Classification

Anterior vaginal wall prolapse
• Urethrocele: urethral descent
• Cystocele: bladder descent
• Cystourethrocele: descent of bladder and urethra

Posterior vaginal wall prolapse
• Rectocele: rectal descent
• Enterocoele: small bowel descent

Apical vaginal prolapse
• Uterovaginal: uterine descent with inversion of vaginal apex
• Vault: post-hysterectomy inversion of vaginal apex
Prevalence

Pelvic organ prolapse is a very common problem with a prevalence of 41–50 per cent of women over the age of 40 years. There is a lifetime risk of 7 per cent of having an operation for prolapse and a lifetime risk of 11 per cent of having an operation for incontinence or prolapse.
Cystocele
Defined as herniation of the bladder into the anterior vaginal wall. It is caused primarily by damage to the pubo vesical fascia which extends between the back surface of the pubic symphysis up to the cervix uteri. Grand multi parity is the main associated predisposing factor for this type. Commonly associated with herniation of the urethra and in such cases it is called cystourethrocele.
Rectocele
Defined as herniation of the rectum into the posterior vaginal wall. Primarily caused by damage to the perineal body associated with mal sutured episiotomy. In addition, mal sutured third or forth perineal tear is another predisposing factor
A rectocele
Enterocele
Defined as herniation small bowel loops into a peritoneal sac at the upper posterior vaginal wall in between utero sacral ligaments. The main etiological factors include all causes which increase intra abdominal pressure like COLD, obesity and constipation.
Vault prolapse
Defined as herniation of the vault among women already done hysterectomy before. The main cause of this condition is failure to support and the cardinal ligaments into the vaginal vault after removing the uterus.
vault prolapse
Uterine prolapse
Defined as descent of the uterus within the vaginal duct. Primarily caused by damage to the cardinal ligaments due to pushing as labor before full cervical dilatation. Other cause includes applications of forceps before full dilatation of the cervix.
uterovaginal prolapse
Grading

Three degrees of prolapse are described and the lowest or most dependent portion of the prolapse is assessed while the patient is straining:

• 1st: descent within the vagina
• 2nd: descent to the introitus
• 3rd: descent outside the introitus.
Aetiology

Ageing
Congenital
Childbirth and raised intra-abdominal pressure
Postoperative
Symptoms
A symptomatic in mild cases.
Lump in the vaginal is the most common presentation.
Backache
Urinary incontinence in the form of stress incontinence.
Apareunia and dyspareunia.
Abdominal cramps.
Nausea and vomiting.
Examination of patient with genital tract prolapse
Standing position; in some mild cases of vaginal wall and uterine prolapse, examination of the patient in standing position is the only way to explore it.
dorsal position; mostly for demonstration of uterine prolapse. Either the uterus will be obviously protruded, or protrude when the patient is asked to strain.
Sim's position; in this position our aim is to demonstrate the different types of vaginal wall prolapse. The patient is asked to lie on her left side at the edge of the table. The left leg is extended, while the right leg is flexed. Afterward a sterile Sim's speculum is inserted into the vagina gently first to expose the anterior vaginal wall. Then it is pulled backward gradually to expose the posterior vaginal wall. Cystocele and rectocele are usually diagnosed by this examination.
Examination in Sim's position
Differential diagnosis

• Anterior wall prolapse: congenital or inclusion dermoid vaginal cyst, urethral diverticulum.
• Uterovaginal prolapse: large uterine polyp
Investigations

• There are no essential investigations.
• Urine microscopy, cystometry and cystoscopy should be considered. The relationship between urinary symptoms and prolapse is complex.
• Serum urea and creatinine should be evaluated and renal ultrasound performed.
• For women with symptoms of obstructed defaecation, MR proctography can help diagnose a rectocele.
MRI proctogram demonstrating rectocele
Prevention

Shortening the second stage of delivery and reducing traumatic delivery may result in fewer women developing a prolapse. The benefits of episiotomy and hormone replacement therapy at the menopause have not been substantiated.
Treatment

The choice of treatment depends on the patient’s wishes, level of fitness and desire to preserve coital function.

Prior to specific treatment, attempts should be made to correct obesity, chronic cough or constipation. If the prolapse is ulcerated, a 7-day course of topical oestrogen should be administered.
If a woman is found to have uterovaginal prolapse on examination but has no symptoms, then it would be inappropriate to offer any surgical treatment and either observation or conservative therapy would be best. If symptoms are mild, then pelvic floor physiotherapy is offered.

Silicon rubber-based ring pessaries are the most popular form of conservative therapy. They are inserted into the vagina in much the same way as a contraceptive diaphragm and need replacement at annual intervals.
Shelf pessaries are rarely used but may be useful in women who cannot retain a ring pessary. The use of pessaries can be complicated by vaginal ulceration and infection. The vagina should therefore be carefully inspected at the time of replacement. There are a whole range of newer pessaries that are undergoing evaluation and these may be more comfortable for the patient.
Indications for pessary treatment are:

• patient’s wish;
• as a therapeutic test;
• childbearing not complete;
• medically unfit;
• during and after pregnancy (awaiting involution);
• while awaiting surgery.
New range of pessaries
Ring pessary

shelf pessary.
Anterior colporraphy for cystocele
This the main operation used to treat cystocele. In this operation, the damaged pubo cervical ligament is reconstructed. The stretched vaginal wall is excised and then suturing the defect. The most common complications include infection, hematoma vesico vaginal fistula. Stenosis
Posterior colpoperineorrhaphy for rectocele
This operation is used primarily to treat rectocele. First the damaged perineal body is reconstructed. The inner most part of levator ani muscle are approximated. After trimming the stretched vaginal wall, the defect is sutured. The most common complications include hematoma formation and infection. Stenosis of the vagina is also likely as remote complication.
A. Incision in mucocutaneous border

B. Flap reflected and rectocele exposed

C. Manual depression of rectocele

D. Fascial edges closed and interrupted mattress sutures laid in levator ani
Vaginal hysterectomy

Vaginal hysterectomy is still the main operation used to treat uterine prolapse. In this operation the uterus is removed from the vagina rather than the abdominal wall. The pedicles are ligated in reverse manner than the abdominal operation. Complications include infection, hematoma, fistula and vault prolapse. Frequently concomitant reconstruction of anterior and posterior vaginal wall is done. Vaginal hysterectomy is absolutely contraindicated in the presence of ovarian, endometrial and cervical cancers. It is also relatively contraindicated when the uterine size is more than 12 weeks or fibroid are present.
Manchester’s operation is done for uterine prolapse with grade I among young women who have not completed their family size. The elongated cervix is cut. The stretched cardinal ligaments are also cut and ligated to the remaining part if the cervix, remote complications include cervical incompetence, cervical stenosis. Recurrence of uterine prolapse is also likely to occur.
Uterus fixed in place by ligaments sutured across it. Vaginal mucosa approximated.
Colpocleisis or obliteration of the vagina
This operation for uterine prolapse is done as palliative procedure for very old women who are completely incompatible with general anesthesia. Simply after returning the uterus, the anterior and posterior vaginal walls are sutured together to obliterate the vaginal cavity, thus preventing the uterus from descent. The operation can be done under local anesthesia.