Types of Prolapse Surgery

Apical Suspensions

The most important aspect of a prolapse repair (when maintaining sexual function is desired) is restoration of the support of the top of the vagina which is also called the vaginal apex or vault. Common procedures that do this are:

Abdominal Sacral Colpopexy (ASC) – The ASC is performed through an abdominal incision (about 3-4 inches long), laparoscopically (through 4 half inch incisions) or roboticaly. In this procedure straps of <u>graft material</u> are used to reinforce the front and back walls of the vagina. These straps are then attached to a strong ligament overlying the sacrum. The end result is that the vagina is suspended over the pelvic muscles to the back-bone. The mesh graft straps replace the original natural support provided by the uterosacral ligaments.

Uterosacral or Sacrospinous Ligament Fixation – When a vaginal incision is preferred, the top of the vagina is most often suspended to a woman's own uterosacral ligament or the sacrospinous ligaments. Traditionally these procedures did not use graft material. Recently, more surgeons are adding graft reinforcement to the natural ligament suspensions in an effort to improve the durability of the prolapse repair when surgeons find the vaginal wall to be weak. Research studies are being conducted to determine if this desired benefit will result in superior outcomes.

Anterior Vaginal Prolapse Repair

A <u>Cystocele</u> or bulge of the front wall of the vagina usually results in loss of support to the bladder that rests upon this part of the vagina. The goal of a cystocele repair is to elevate the anterior vaginal wall back into the body and support the bladder. This can be done either vaginally called anterior colporrhaphy or through an abdominal approach at the time of a sacral colpopexy. Anterior colporrhaphy is a commonly performed repair of a cystocele. In an anterior colporrhaphy, an incision is made in the front wall of the vagina. The vaginal skin is separated from the bladder wall behind it. The weak or frayed edges of the deep vaginal wall are found and the strong tissue next to edges are sutured to each other lifting the bladder and recreating the strong "wall" underneath it. The vaginal incision is then closed with dissolving stitches. Unfortunately, this part of the pelvic floor is subjected to significant pressure with each cough or when picking up heavy things. As many as one third of women will develop recurrent anterior prolapse after an anterior colporrhaphay. To reduce this recurrence of prolapse, a surgeon may chose to place a "patch" of graft material over the repair line to reinforce the repair. Studies are in progress to help us learn whether or not using grafts provides superior results when compared to traditional surgeries. The studies will also compare the risks of the two types of procedures and who benefits most from the mesh reinforcements.

Posterior Vaginal Prolapse Repair

A <u>rectocele</u> or bulge of the back wall of the vagina is most often repaired by a vaginal procedure called posterior colporrhaphy. If the muscles at the opening of the vagina have been stretched or separated during childbirth, the repair may include a perineorrhaphy. A rectocele may also be fixed abdominally at the time of a sacral colpopexy.

Posterior Colporrhaphy - Colpo- means "vagina" and –rhaphy means "repair of." Posterior colporrhaphy is a procedure that repairs the rectal bulge protruding through the back wall of the vagina. During the colporrhaphy procedure, an incision is made in the back wall of the vagina. The vaginal skin is separated from the rectal wall underneath. The weak or frayed edges of the deep vaginal wall tissue are identified. The strong tissue next to edges are sutured to each other recreating the strong "wall" between the rectum and the vagina. The vaginal incision is then closed. At times, a surgeon may chose to place a "patch" of graft material over the repair line to reinforce the repair. Studies are ongoing to help understand the role of these graft materials in rectocele repair. Your surgeon will most likely close the incision with self-dissolving stitches.

Perineorrhaphy - Surgical reconstruction of the muscles of the perineum, the area between the vagina and the rectum. This procedure involves reattaching a number of small muscles that normally connect in this area.

Obliterative Procedures

For those women who do not need to maintain sexual function, an obliterative procedure may be the quickest and least risky method to correct prolapse. Obliterative operations correct prolapse by narrowing and shortening the vagina. These procedures support the pelvic organs with the patients own pelvic muscles in such a way as to make the vagina too small to accommodate a penis for sexual intercourse. The skin overlying the vaginal bulge is removed, and the front and back walls of the vagina are sewn to each other. A woman who has undergone this surgery will look the same on the outside of her genital area and she will be able to have bowel movements and urinate normally. Her ability to have an orgasm with clitoral stimulation is similar to before her surgery.

There are two main types of obliterative surgery:

- partial (colpocleisis)
- complete (colpectomy)

Both are very effective and durable in correcting prolapse. Prior surgeries often influence which procedure is offered to women. The benefit of obliterative surgery is that it is very durable, does not involve the risks of graft materials, tends to be less invasive and therefore is associated with a quicker recovery.