Editorial

Structuring reconstruction surgery in pelvic organ prolapse surgery

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> Declare the past, diagnose the present, foretell the future; practise these acts. As to diseases: make a habit of two things- to help, or at least do no harm.
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> Hippocrates; Epidemics, Bk I, sect XI

The two groups of patients most neglected in prolapse surgery are the very young women with prolapse and the patient who had a suboptimal result after prolapse surgery. The reason why any gynecologist is not keen to operate on the young woman with symptomatic prolapse is the awareness that the repair gives not only poor long term results, but also results in tissue damage.

The patient who had had previous surgery, with a suboptimal result, creates a dilemma for the surgeon: the footprint of the previous surgery makes assessing difficult, and the re-do surgery is difficult due to tissue scarring and removal of tissue with the primary surgery. Success in addressing the prolapse is also less guaranteed with repetitive surgery. The use of synthetic materials in the vaginal wall of a young patient is for obvious reasons not an option, and in a patient with suboptimal result a challenge for repeat surgery.

A more structured approach to prolapse repair can be a viable option for these two groups of patients. If the primary surgery is done on a structured manner the harm done to the young patient is minimal. The re-do of failed previous repairs can also be done in a structured constructive manner- be it by repairing the underlying pathology (in a side and site specific manner) and bolstering it with a collagen graft, or by bridging the gap left by the undo process with a non-cross linked bio graft. In this re-do group of patients one obviously needs to motivate why one did not do the primary surgery in a structured constructive way in the first instance.

The yardstick of successes and failures of surgical results, though, is not only the claiming of successful correcting the damage or defect, but also the ability to deal with the complications. With a focus on the suboptimal results, be it failing to correct what had been set out to be done, or causing damage -even if the defect had been corrected-, one comes across what can be called the undo re-do factor of surgery. Before the surgical correction of the defect can be done with a secondary procedure (re-do) the after effects of the primary surgery must be undone (undo). This factor is what in the end will be the surgical legacy or footprint of the surgeon.

Prolapse surgery of yesteryear is based on getting rid of the bulging vaginal wall- it is seen as a central bulge of the underlying organ into the non supportive vaginal wall. The bulge is directly folded back to take the underlying organ away from the vaginal cavity. In the resultant surgery, tissue –be it vaginal skin or even perfectly normal organs like the uterus- is being removed. The formation of scar tissue can be experienced as an advantage. The first attempt at surgery is usually the best chance of success. In this type of surgery no reference is made to seek out and repair the underlying pathology that leads to the prolapse- the symptom of the disease is treated and not the cause. Secondary corrective surgery is to be done against the background of tissue damage and scarred tissue. The undo factor is hampered by scar tissue formation and at times depleted tissue. Especially the re-do aspect of surgery is challenging – shall one do the same procedure again or shall it be an alternative method?

No wonder that "innovative" avenues of pelvic floor surgery are being explored. In most of these pelvic organ support is being created by the introduction into the pelvis of different kinds of grafts and mesh implants. The basis of these surgical procedures in the anterior vaginal wall is to release the anterior vaginal support from its lateral sidewall attachments to the white line and the attachments to the central cervical ring. An indirect support system is created by bridging the gap from white line to white line, posterior aspect of the pubic rami to interspinous space with a xenograft or mesh of synthetic materials. The procedures are simplified to make incompetent surgeons more competent. Unfortunately do this lead to an increasing number of reports of complications- in most cases leading to corrective surgery and even removal of the placed materials. The undo re-do factor- especially the undo part- in these cases is high leaving the patients worse off compared to what they had been before the primary surgery. To re-do one needs to follow a new avenue of surgery.

Recognition of normal anatomical landmarks, understanding the integration of normal anatomy and normal function and how it is influenced by the damage that is present with pelvic organ prolapse provides the basis of successful reconstruction surgery. Suboptimal results in the standard treatment modalities available must be compared, with an emphasis on the undo/redo factors of each. This will show that an alternative could be to restore normal anatomy on a structured reconstructive way- especially if one realizes that it is never possible to reconstruct the vaginal supports in one operation only in all cases of prolapse. The primary surgery must allow for the laying down of building blocks that, if it does not result in full restoration of normal anatomy and function, at least can function as a foundation on which further surgery can be done. This will thus be an add-on rather than an undo/redo type of surgery in the patient with a suboptimal result.

This will set the stage for a more staged approach to reconstruction of the pelvic floor supports. An engineer will not build a bridge without laying the traffic still- we want to do that with still having the traffic present. With this approach it may be possible.

Could it be that our judgment is so clouded by industry and the input from them that we are blinded to see the obvious? It may be time to admit that the use of synthetic material- especially between the bladder and vagina- had been a surgical experiment that failed. We must look for better and fresher ideas.

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