Surgery for Pelvic Floor Disorders

June 23, 2011
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Pelvic floor disorders: Cystocele, Rectocele - Enterocoele, Descensus Uteri, Incontinence

**Pelvic floor disorders:**

Cystocele, Rectocele - Enterocoele, Descensus Uteri, Incontinence

**Vaginal surgery:**

Colporaphia anterior and posterior, Richter, TOT, Laparoscopic surgery, Burch, Paravaginal defect, Levator plasty-High Mc Call-Colposuspension

**Surgical Strategy**

Pelvic floor disorders:

Cystocele
Rectocele - Enterocoele
Descensus uteri
Incontinence

**Types of Surgery**

**Vaginal surgery:**
Colporaphia, Anterior and Posterior
Richter
The transobturator tape is the most recent treatment of isolated stress urinary incontinence. Principle: Support of the mid-urethra, (similar to the TVT). Advantage:
- virtually risk free in comparison with TOT
- does not hamper subsequent surgery, if necessary
Technique:
- skin incision over foramen obturatorius.
- can be done under local anesthesia
- hospitalization: day surgery, eventually 1 day.

Paravaginal Defect

Levator Plasty-High Mc Call-Colposuspension

In order to correct an important posterior descent and or a prolapse of the vaginal cuff, a posterior repair is performed. When the defect is more severe, surgical repair will be more extensive. The surgical procedure, therefore; will vary from a McCall only to a sacrocolposuspension.
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\textbf{a high McCall} \((=\text{shortening of uterosacral ligaments})\)
\begin{itemize}
  \item + \textbf{a levator plasty} \((=\text{repair of the defect between the levator ani muscle})\)
  \item + \textbf{a mesh attached to the uterosacral ligaments}
  \item + \textbf{a mesh attached to the promontorium} \(\text{when uterosacral ligaments are defective.}\)
\end{itemize}
Randomized trials which compare the effectiveness and long term results and complications, are not yet available. Today the following rules seem logic:
\begin{enumerate}
  \item Do not over treat: it is not necessary to perform very extensive corrections for small defects.
  \item Do not open the vagina when doing a mesh repair.
\end{enumerate}
Below are a series of pictures depicting the successive steps of a\textbf{ levator plasty + high McCall + mesh attached to the uterosacrals}. 

![Series of pictures]

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Surgical Strategy
For pelvic floor repair we use the following principles:
1. Site specific repair i.e. repair of the defect only.
2. Restrictive use of a mesh i.e. when necessary only. A mesh by definition carries a little risk of complications such as infection, mesh erosion and more complicated subsequent surgery when necessary.
Therefore:
1. A stress urinary incontinence without cystocele (bladder descent) : a TOT (transobturator tape). The reasons for this choice are :(1) it is the least invasive procedure virtually without risks. (2) it will not compromise any future surgery (3) the results seem comparable to the TVT, which therefore is no longer used.
If the surgery fails to cure the stress urinary incontinence (some 10%) a laparoscopic Burch
procedure is performed.

2. A large cystocele with or without stress incontinence.
   - a vaginal colporaphia anterior for a midline defect of the pubovesical fascia. Stress incontinence is treated simultaneously (Kelly points) but long term results are not very good.
   - a laparoscopic paravaginal defect repair for lateral defects. Simultaneously a Burch can be performed for stress incontinence.

3. A rectocele - enterocoele: the choice of procedure is not always easy since some are mutually exclusive
   - a low defect only can be repaired by a vaginal colporaphia posterior.
   - for a larger defect a laparoscopic procedure is performed, and after inspection of the defect during this procedure it is decided whether to perform a high McCall procedure only or with a levatorplasty: the advantage is that no mesh is used and that this can be combined with a colporaphia posterior.
   - a laparoscopic paravaginal defect repair for lateral defects. Simultaneously a Burch can be performed for stress incontinence.

4. A vaginal cuff prolaps: a posterior mesh repair + repair of the "pericervical fascia" i.e. attachment to the pubopelvic fascia + repair of a paravaginal defect for the larger ones.

5. Combined defect such as a uterine prolaps with cystocele and rectocele.

Solution 1: a vaginal hysterectomy + colporaphia anterior and posterior. This is the "classic" approach. The drawback is a relatively high recurrence rate around 20% to 30%. This is not surprising since this type of surgery cannot correct a paravaginal defect (which is much more frequent than a midline defect) whereas a levatorplasty is limited to the lower part of the vagina and a suspension with uterosacral repair is more difficult.

Solution 2: a laparoscopic hysterectomy + a paravaginal defect repair + a posterior repair. The disadvantage is that a mesh is relatively contra-indicated since the vagina has to be opened. This has been reported to increase complications as a mesh erosion form 0.5% to more than 5%. Variability of surgical techniques and expertise however cast doubt on these figures. The most important reason why this procedure is not so popular is that in order to perform this combined procedure in less than 2.5 hours the surgeon has to be fast and very experienced. Otherwise the procedure can become very long.

Solution 3: sequential treatment: a vaginal hysterectomy + a colporaphia anterior and posterior followed by a laparoscopic repair if a recurrence of prolaps occurs.

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