Sacropexy of the vagina

- **Operation concept:**
  - Anchorage of the vaginal end on the sacrum. (Promontory until S4/5, Patch or Mesh). By today’s results a preference should be given to a Polypropylene Net. An anatomically correct position is achieved, if the vaginal stump shows in direction to the Sacrum cave. In case of a rectocele a surgical reconstruction before sacropexy is reasonable.

- **Indication:**
  - Massive descensus or prolapse of the vaginal stump
  - In combination with a hysterectomy if you have a massive descensus of the uterus or prolapse of the uterus as a prophylaxis for a vaginal stump prolapse

- **Contraindication:**
  - Common Contraindications for an operation

- **Preoperative information of the patient**
  - Simultaneously Colposuspension after Burch, even if no hidden stress incontinence is given
  - Risk of bladder-, ureter- or bowel-lesions
  - Increased risk for bleedings by preparating the sacral cove
  - Postoperative incontinence is overcorrected
  - Complaints in sexual intercourse
  - Persistent pain in the sacral region
  - Information about implantation of foreign material
  - Risk of net arrosion
  - Risk of infection of the implant followed by explantation
  - Rate of success: 91-100%
  - Recurrence rate 0-15%

- **Operation planning:**
  - Gynecological examination with Vaginal- and Introitus-Ultrasound
  - Urodynamics: Hidden or apparent incontinence
  - Local application of estrogen for four weeks prior operation, such as Ovestin Ovula 1x1
  - Perioperative antibiotic prophylaxis

- **Positioning of patient and cover:**
  - Positioning of the patient in lithotomy position (dorsosacral position).
  - Desinfection of the genital area until the undebelly and emptying of the bladder with indwelling catheter. Inserting a swab on a clamp in the vagina.

  Operation technique
  - Access: Incision (Pfannstiel-incision) in the underbelly. Plugg up the intestine in slight head low position to see the promontory.

  Sacrokolpopexy: Incision and presentation of the situs. Presentation of the vaginal end by pushing the vaginal swab. Open the peritoneum with a transverse cut for 2-3cm over the so presented posterior vaginal fornix. Note: after hysterectomy vagina and rectum can be close to each other.

  With spreading movements of the scissors along the posterior vaginal wall
  - Peritoneum and rectum will be bluntly detached until the middle of the vagina (if
necessary until the Perineum). Anteflection of the vagina with the swab. Anterior preparation of the bladder for 2-3cm. Now a 4cm wide and ca. 10cm long stripe will be cut out of a mesh. It is placed doubly in longitudinal direction and with 4-6 not-resorbable, braided threads (thread-size 2-0) sewn on one side. Split the net terminal for 2-3cm. Fix the posterior arm on the posterior vaginal wall at the upper third of the vagina with the above mentioned threads. Neither the vaginal wall nor the net should crumple. The sutures should be anchored in the vaginal fascia or -muscle without perforating the vaginal wall. Check by retraction of the swab.

The anterior arm of the net has to be shortened and fixed on the anterior vaginal wall and the apex.

Now identify the right ureter and its running, the promontory and the lower sacrum parts right next to the rectum. After that a 2-3cm incision of the peritoneum on the right pararectal on height of the later anchorage (ideal S3/4). A physiological axis of the vagina should be aimed. Prepare with an Overholt clamp or preparation swab the sacral cave pararectal on the right until the midline of the sacrum. (Note: sacral venous plexus or N. hypogastricus inferior). Fix 2-3 not-resorbable, braided, atraumatic threads (thread-size 2/0) on the longitudinal fascia (Ligamentum longitudinale anterius) of the anterior Os sacrum.

Now the peritoneum has to be tunnelled pararectal until the incision of the vaginal end and the mesh has to be pulled through to the sacrum. The vaginal end is then placed with the vaginal swab in the desired position without tension. (Note: Overcorrecting!) and the mesh has to be fixed on the sacrum with the submitted threads. Excess parts of the mesh are cut and removed. If there is no bleeding, close the two peritoneal incisions with an atraumatic cotinously suture. (thread-size 3/0)

As prophylaxis of enterocele a high closure of the Douglas with 1-2 continuing purse-string-sutures or sagittal suture will be performed. (Note: Ureter). The purpose of this procedure is disputed. The completion of the intervention is done in the usual way.

Frequent errors and risks:

- Ureterlesions at pararectal opening of the peritoneum
- Fixation of the sutures at the lateral part of the sacrum- periost instead of ligament- sutures pull out easily
- Too tight fixation of the vagina- postoperative stress incontinence and pain
- Fixation of the mesh at the complete area of the posterior vaginal wall- painful sexual intercourse
- Risk of developing an enterocele if the vaginal axis deviates anteriorly, f.e. fixation on the promontory
- Incomplete burial of the mesh under the peritoneum- risk of ileus if an intestinal loop gets incarcerated
Alternative methods:
- Sacrospinal/sacrotuberal vaginal fixation
- Meshrepair
- Abdominal anterior vaginal fixation with a fascial stripe of the Rectus/Obliquusaponeurosis

Postoperative treatment:
- No lift of heavy weights (not more than 5kg) and no sexual intercourse
- Don’t push during defecation

Aftercare:
- Local or systemic estrogen
- Pelvic floor exercises
- Behaviour Modification in lifting, carrying etc.