


Prophylactic vaginal apex suspension at the time of hysterectomy

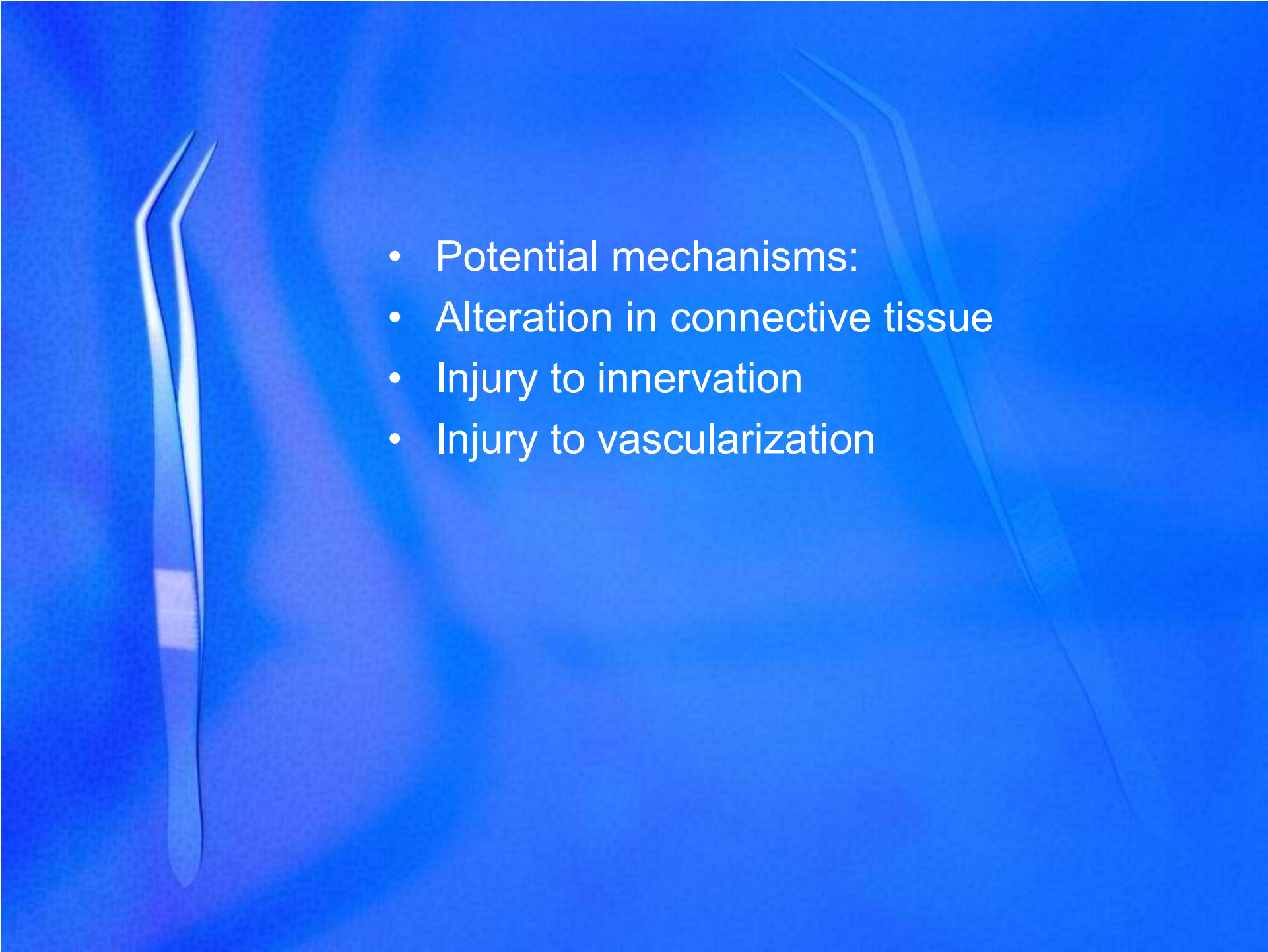
دکتر مریم حاجی هاشمی
دانشیار دانشگاه علوم پزشکی اصفهان
فلوشیپ اختلالات کف لگن

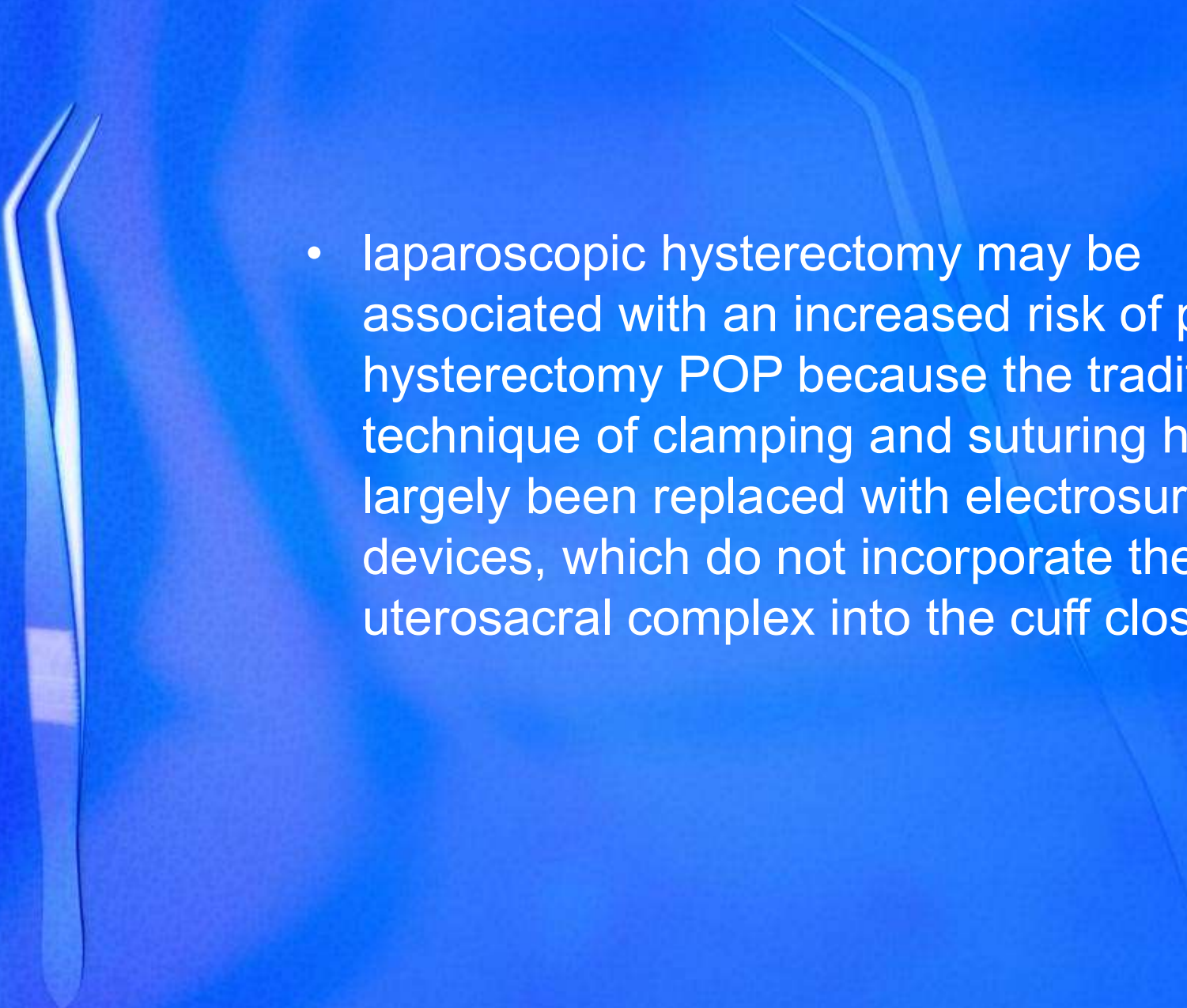
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- study of a United States:
 - over 2.7 million benign inpatient hysterectomies performed between 2004 and 2013 for a diagnosis other than prolapse, only 3 percent had a concomitant prophylactic apical support procedure.
 - The risk of future prolapse appears to be highest when hysterectomy is performed in women with existing prolapse

A retrospective review:

2500 hysterectomies at a tertiary care hospital :

- 55 percent had a concomitant apical support procedure
- procedures performed without apical suspension: 96 percent were performed by general gynecologists
- 96 percent of hysterectomies performed by urogynecologists also included an apical procedure.
- National Quality Forum selected vaginal apical suspension at the time of hysterectomy : **prolapse quality indicators** for United States hospitals


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- Potential mechanisms:
 - Alteration in connective tissue
 - Injury to innervation
 - Injury to vascularization

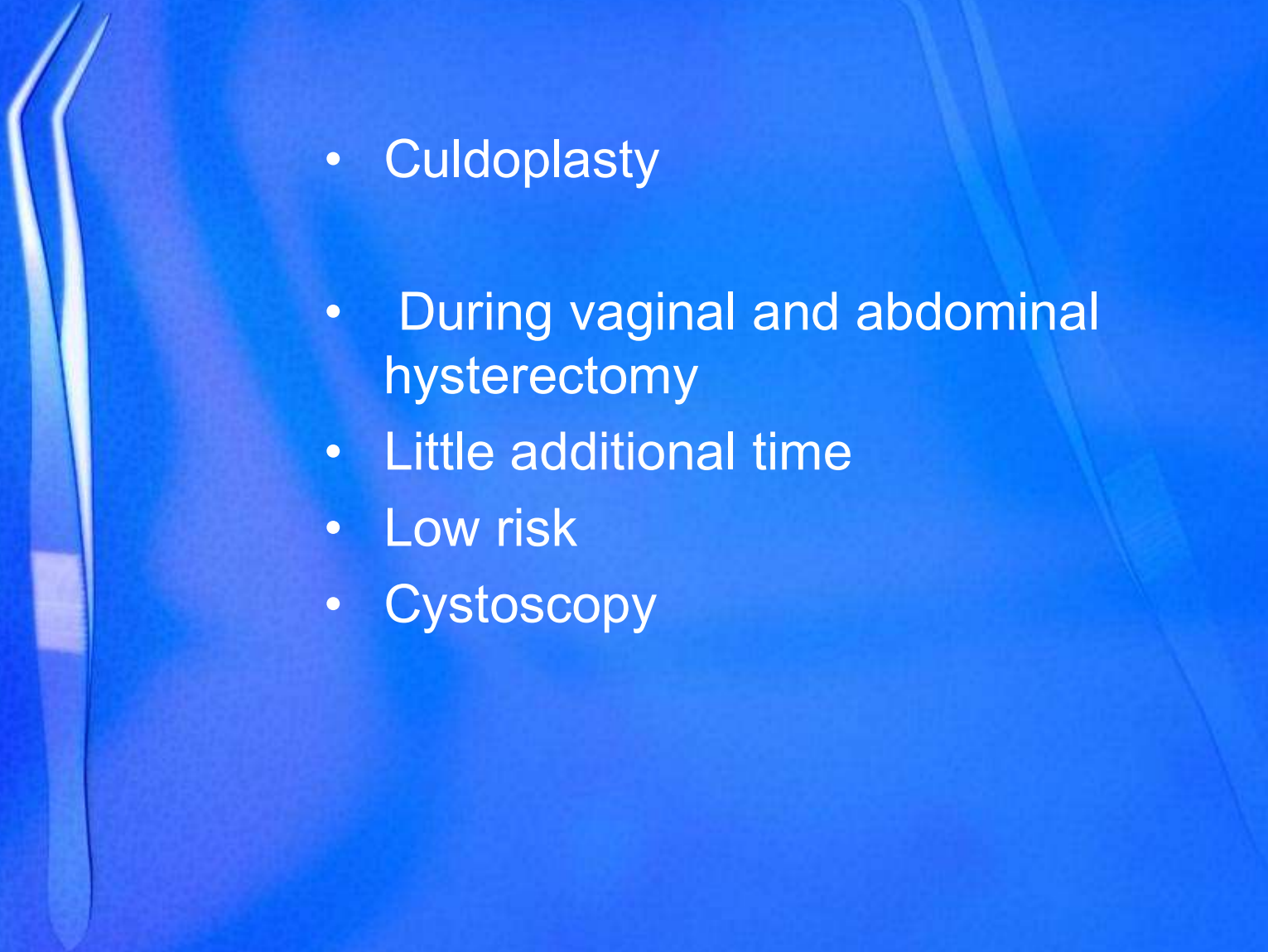
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- laparoscopic hysterectomy may be associated with an increased risk of post-hysterectomy POP because the traditional technique of clamping and suturing has largely been replaced with electrosurgical devices, which do not incorporate the uterosacral complex into the cuff closure.

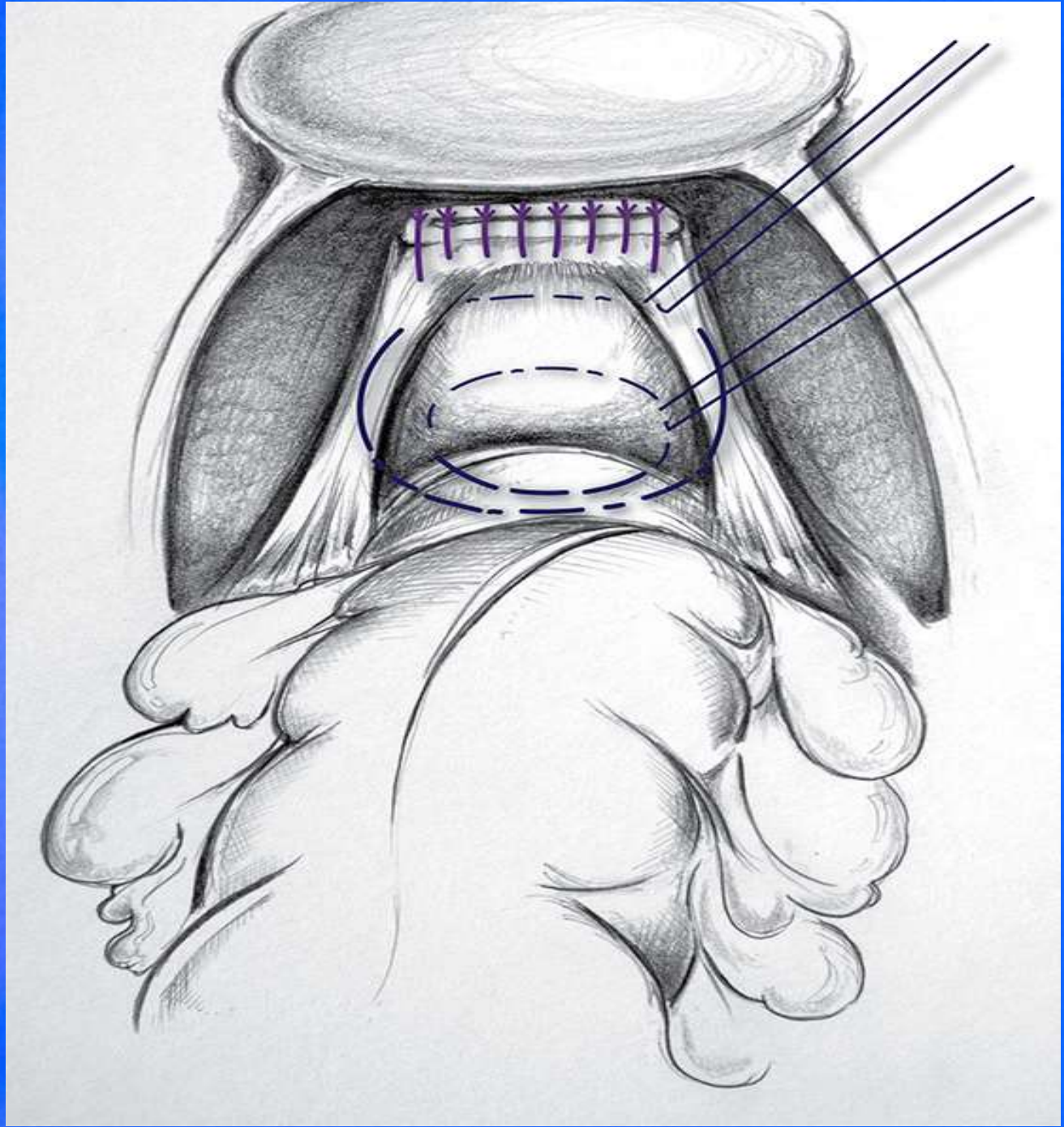
PROPHYLACTIC SUSPENSIONS

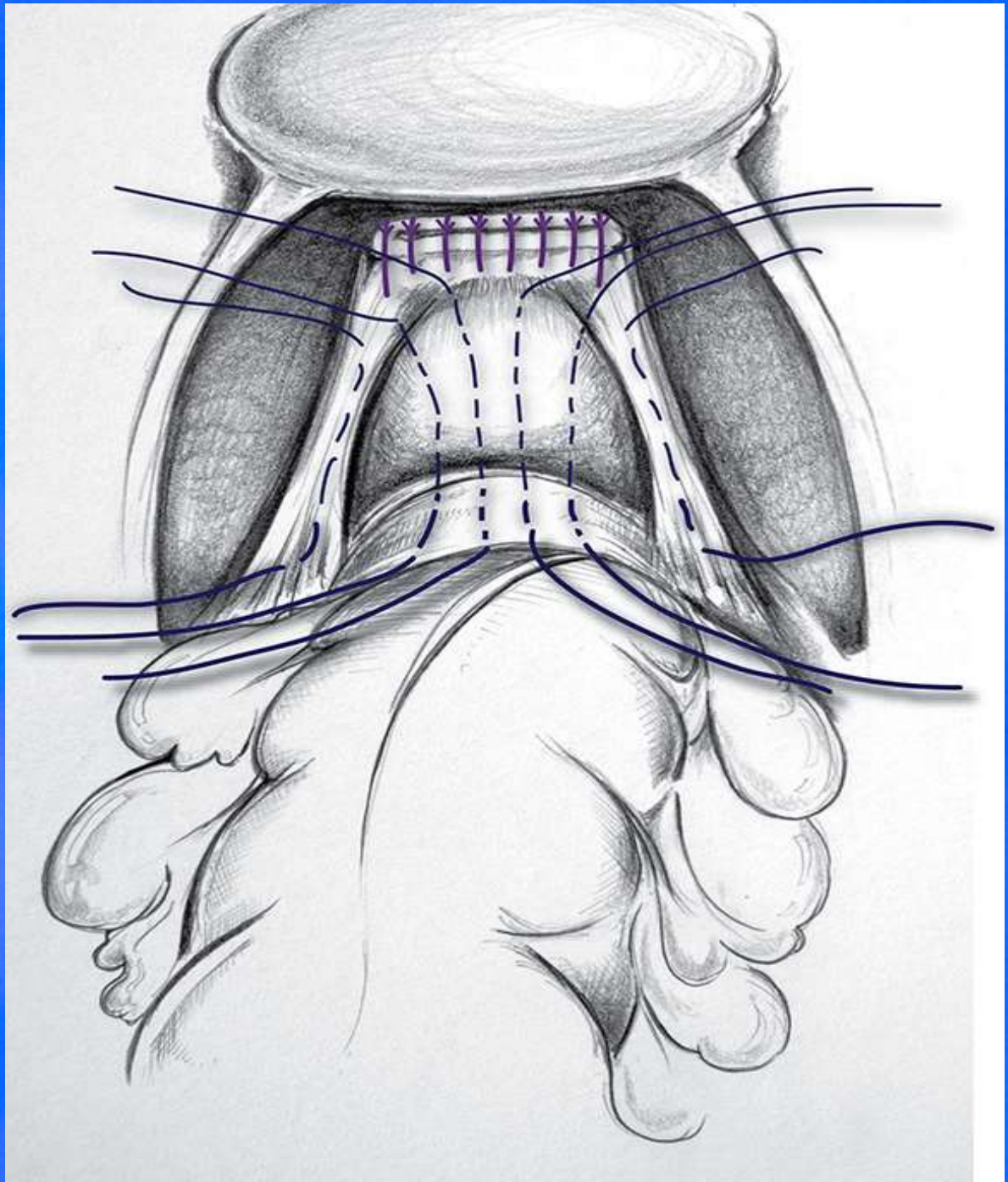
- Incorporation of the uterosacral ligaments into the cuff closure
- Culdoplasty
- Ligamentous suspensions

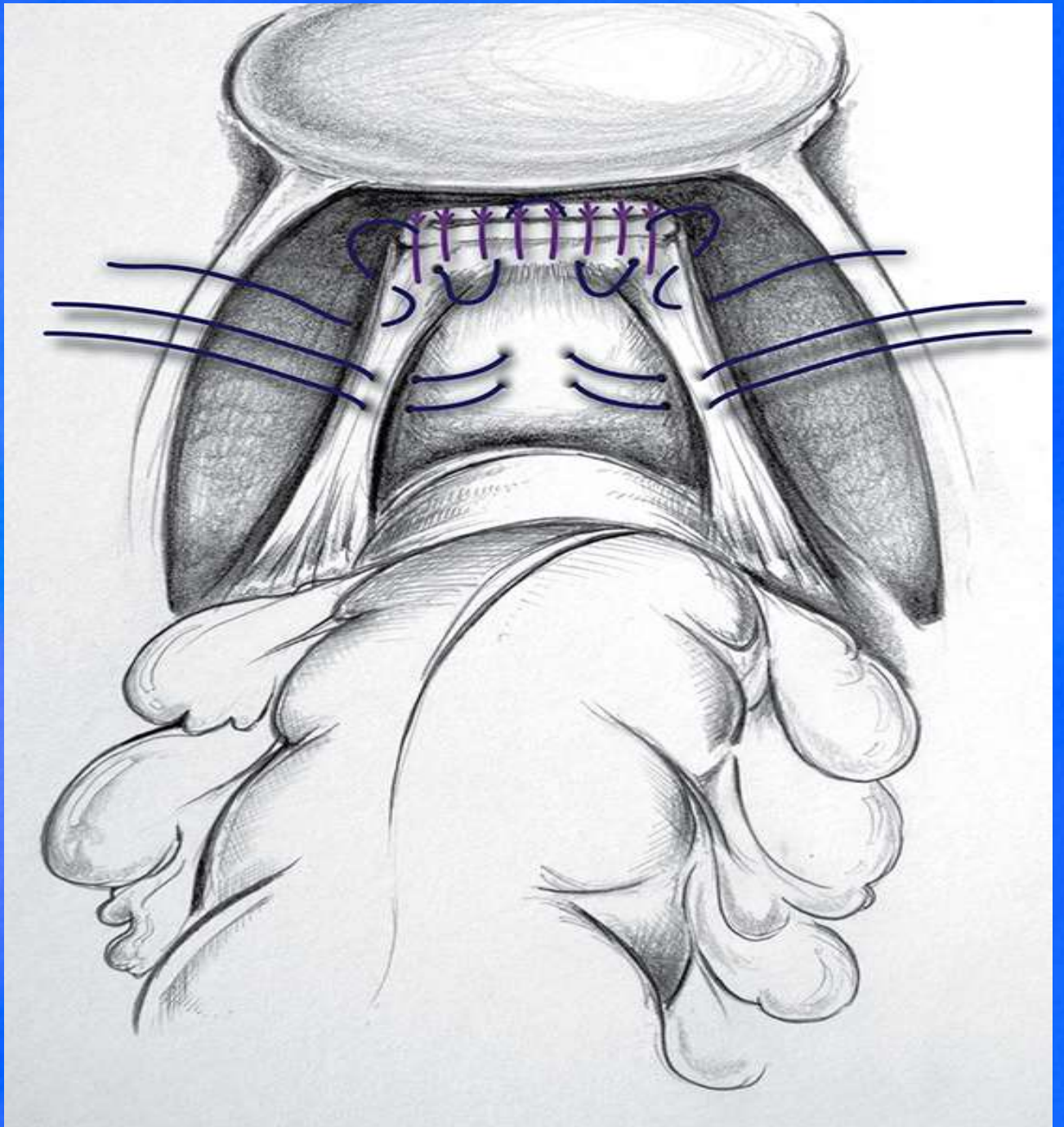


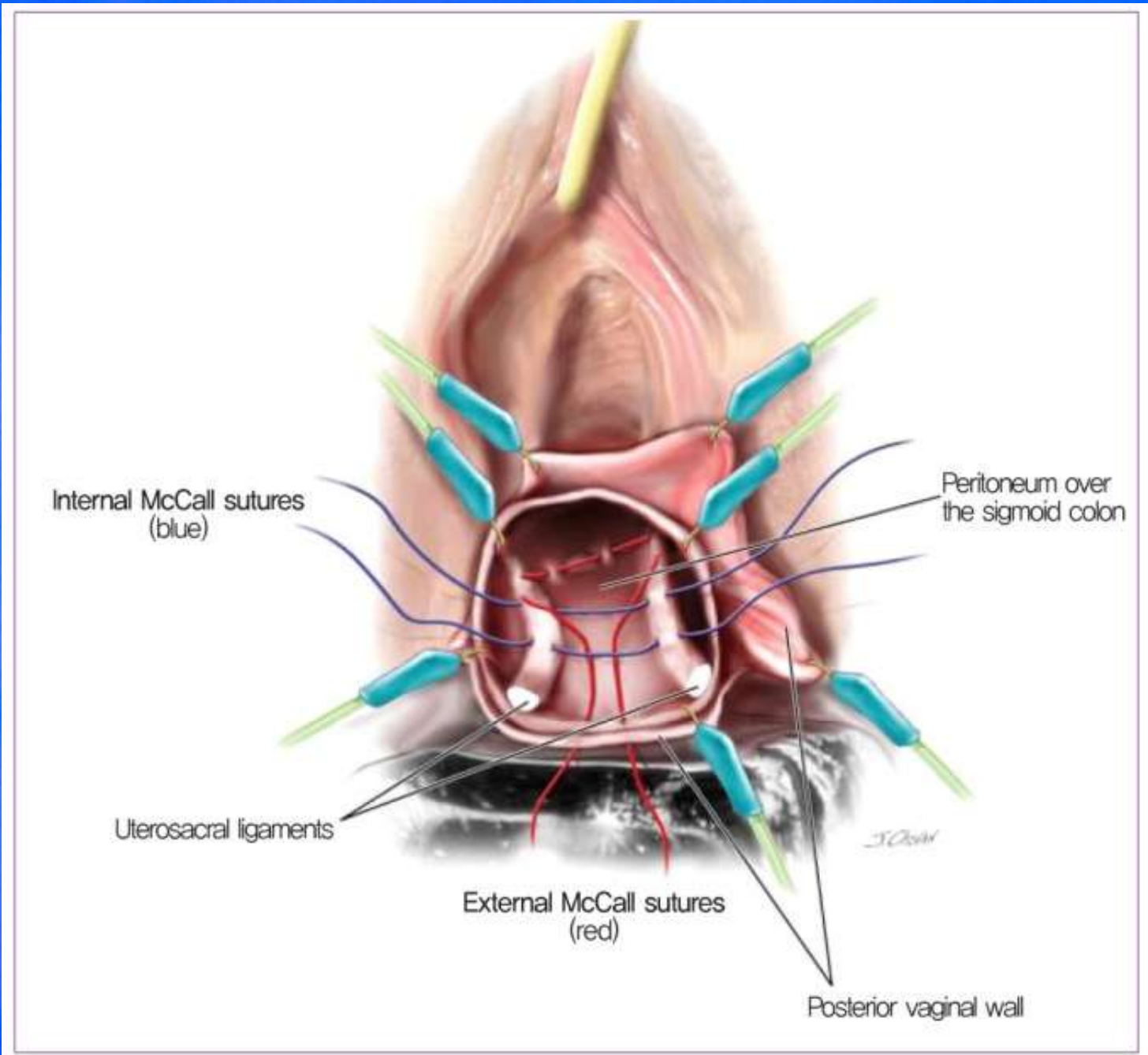
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- Vaginal cuff closure techniques
 - the vaginal cuff are typically attached to the uterosacral ligament pedicles.
 - At least a 1-0 caliber suture and at least six weeks of pelvic rest postoperatively to decrease the likelihood of cuff dehiscence


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- Culdoplasty
 - During vaginal and abdominal hysterectomy
 - Little additional time
 - Low risk
 - Cystoscopy





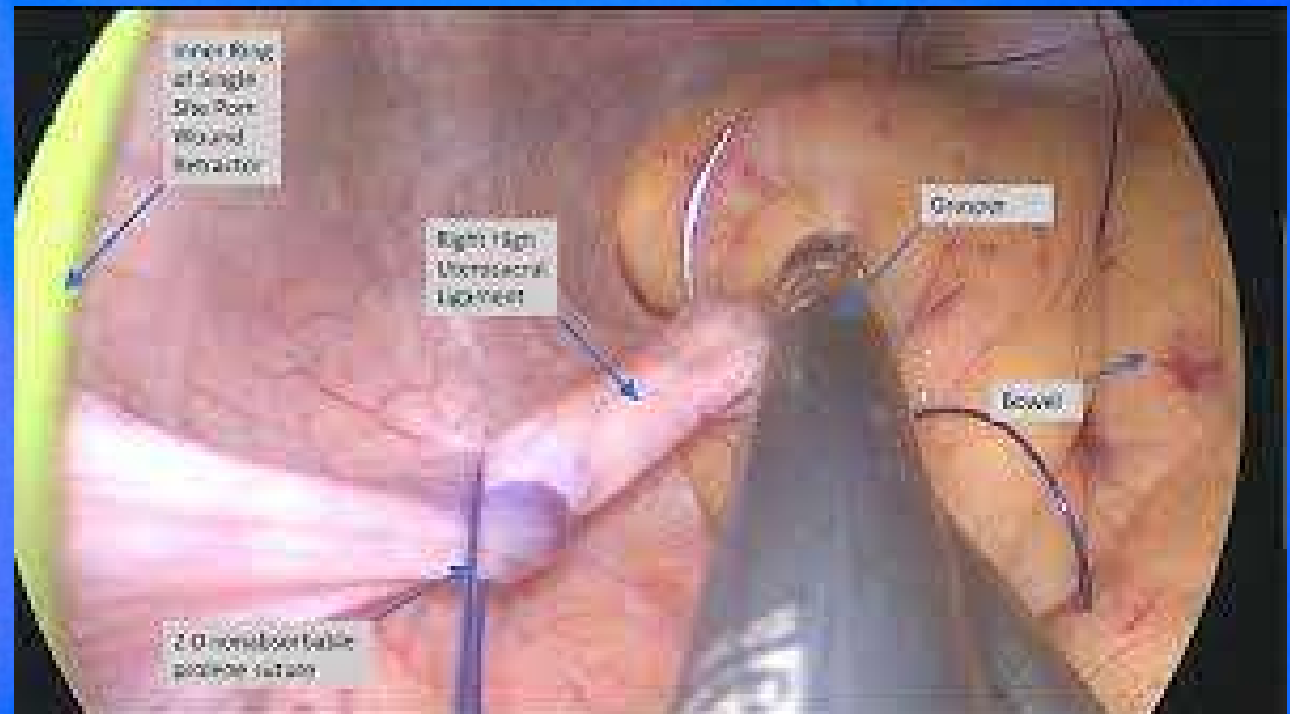


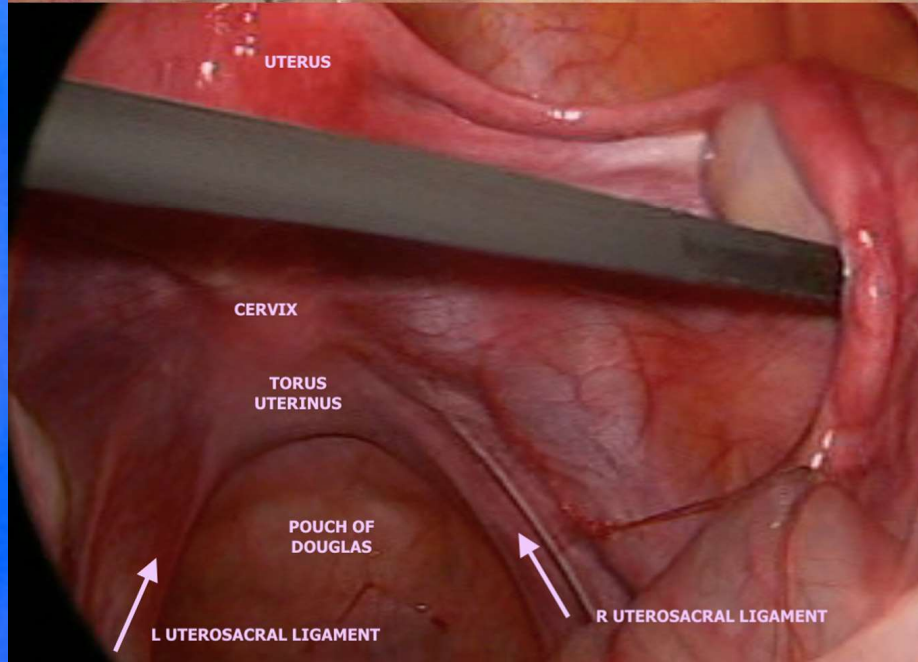
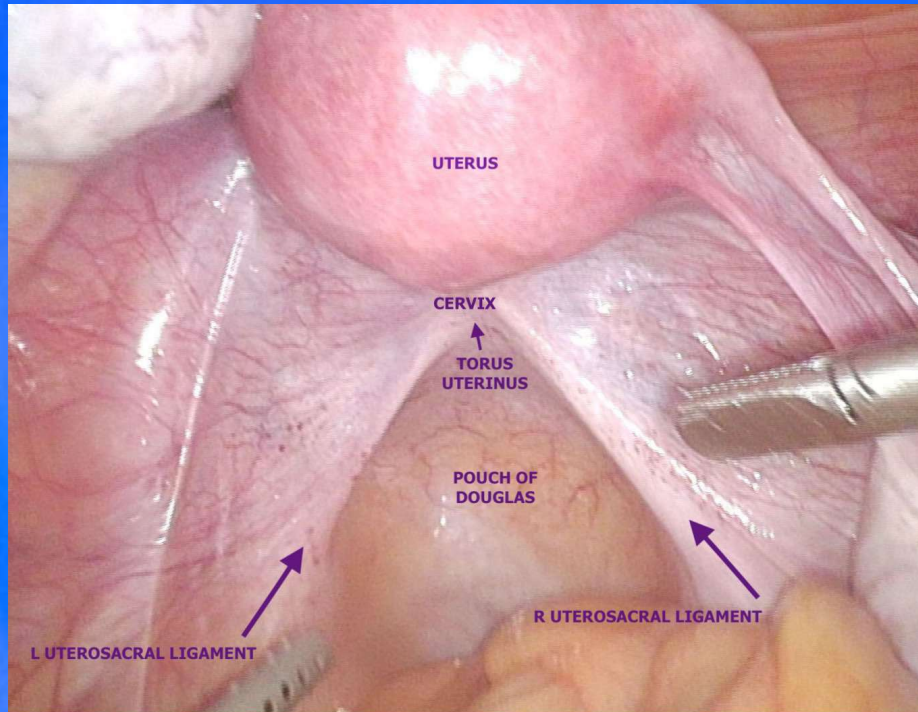


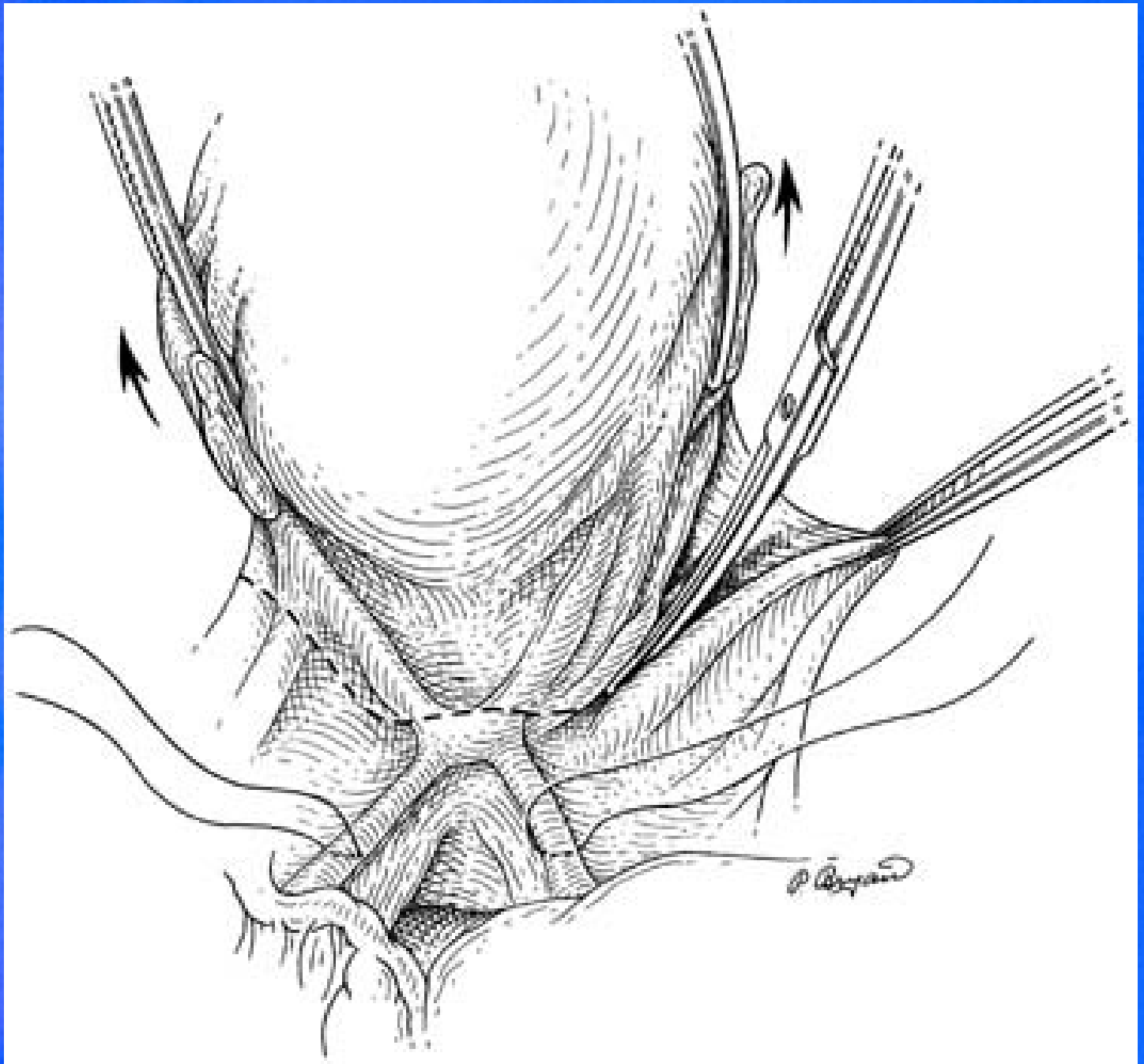
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- At three years of follow-up, the McCall culdoplasty was associated with lower rates of apical prolapse (6 percent for McCall, 30 percent for Moschcowitz, and 39 percent for peritoneum-only)

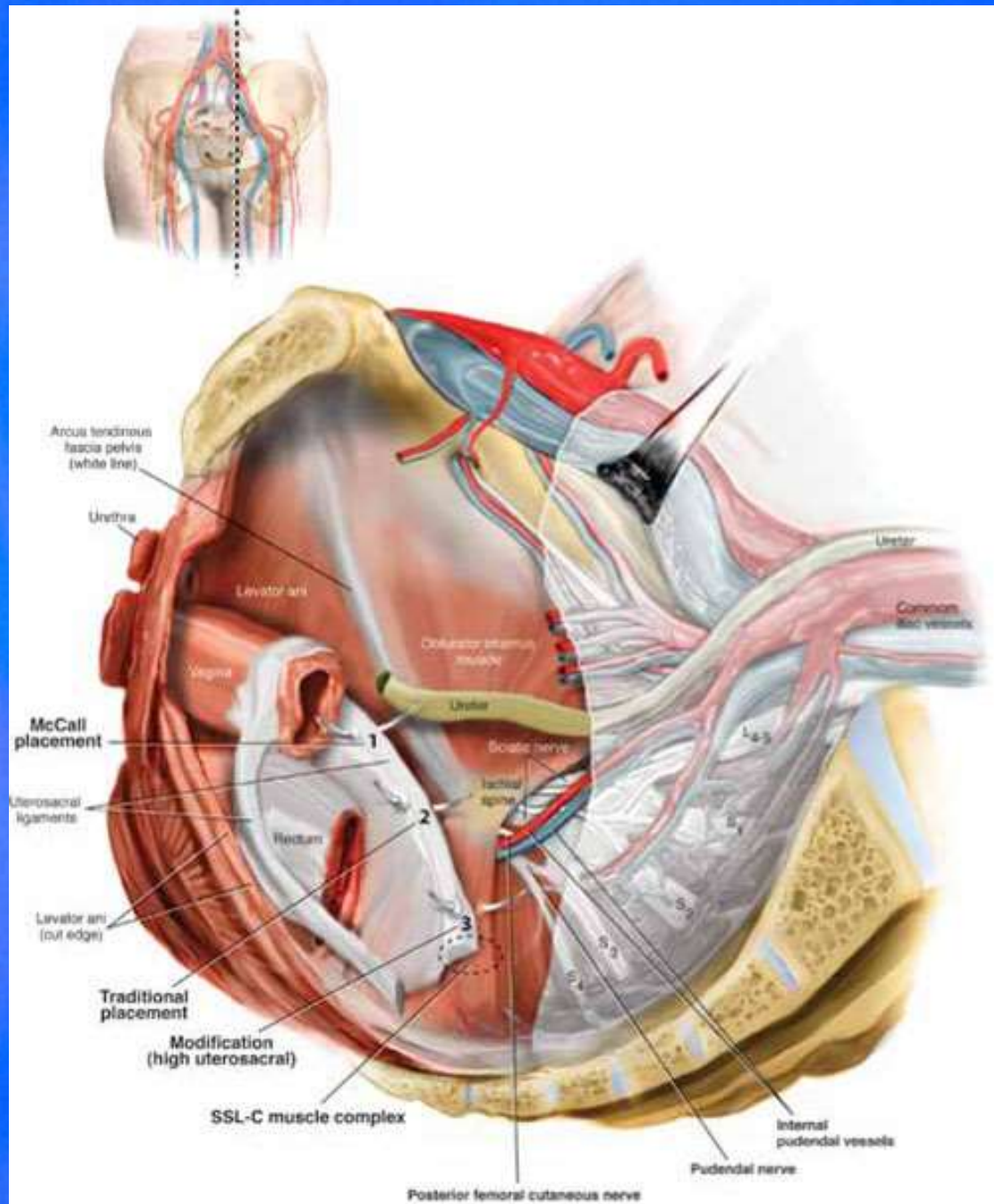
Ligament suspension procedures

- Uterosacral ligament suspension

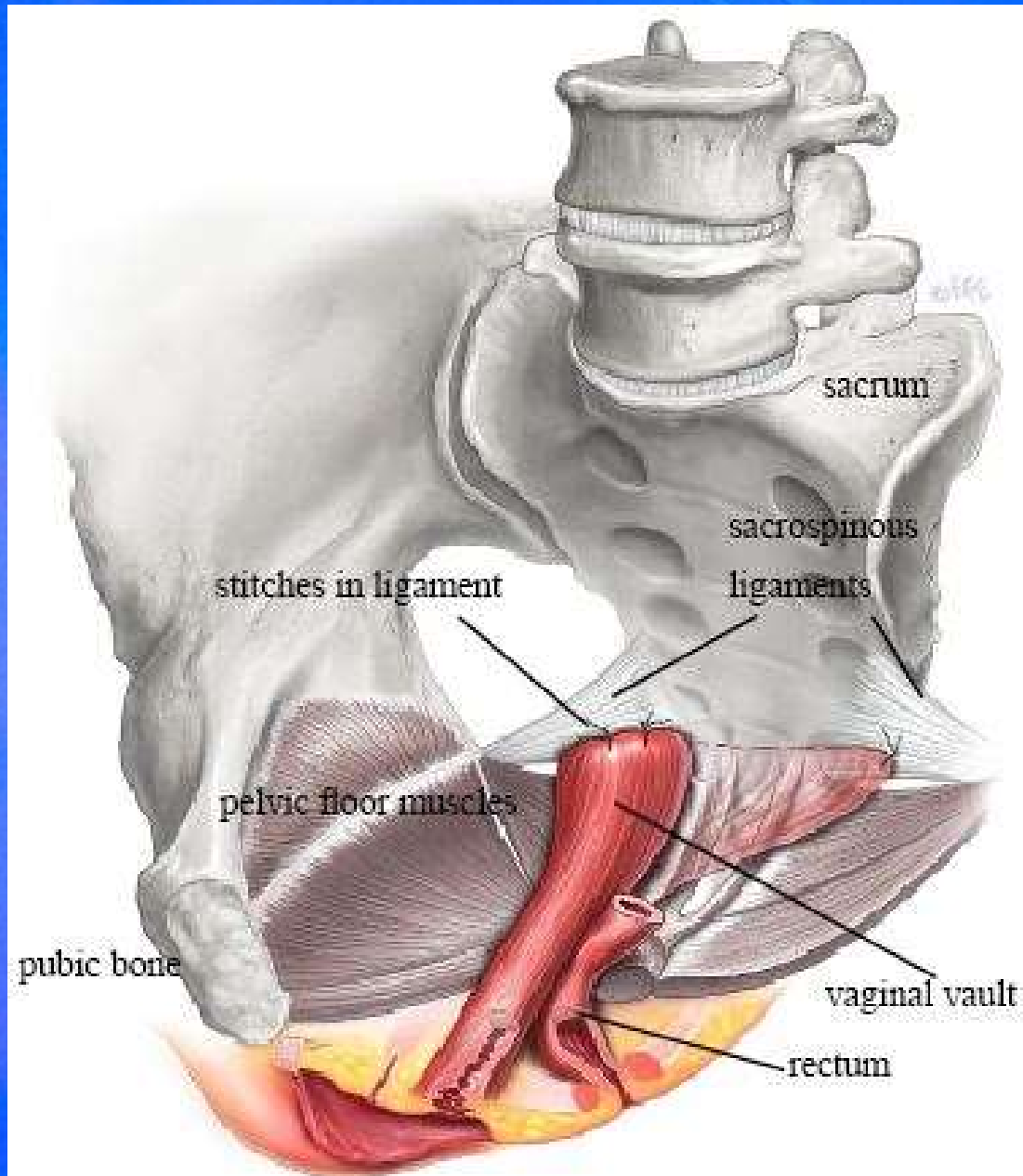








- sacrospinous ligament suspension



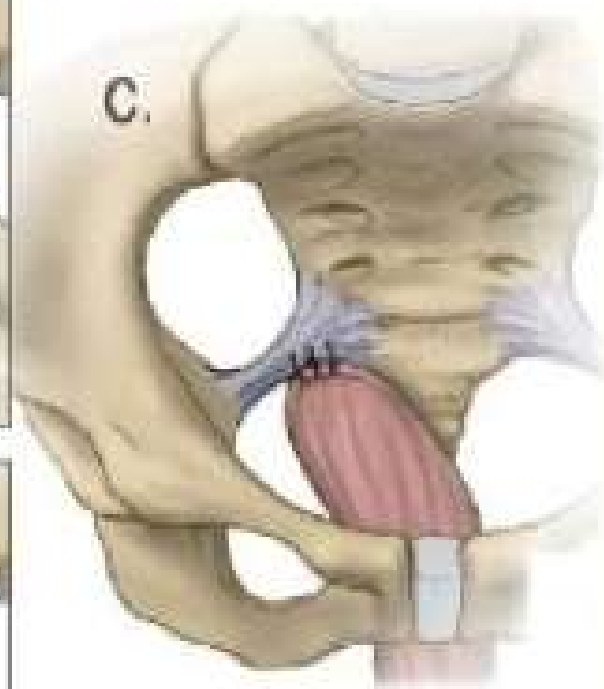
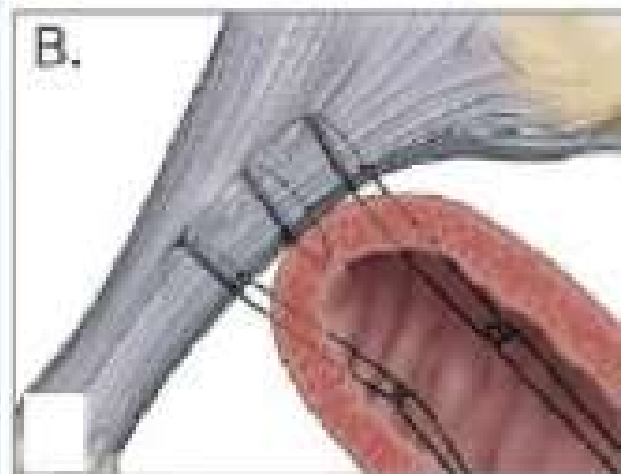
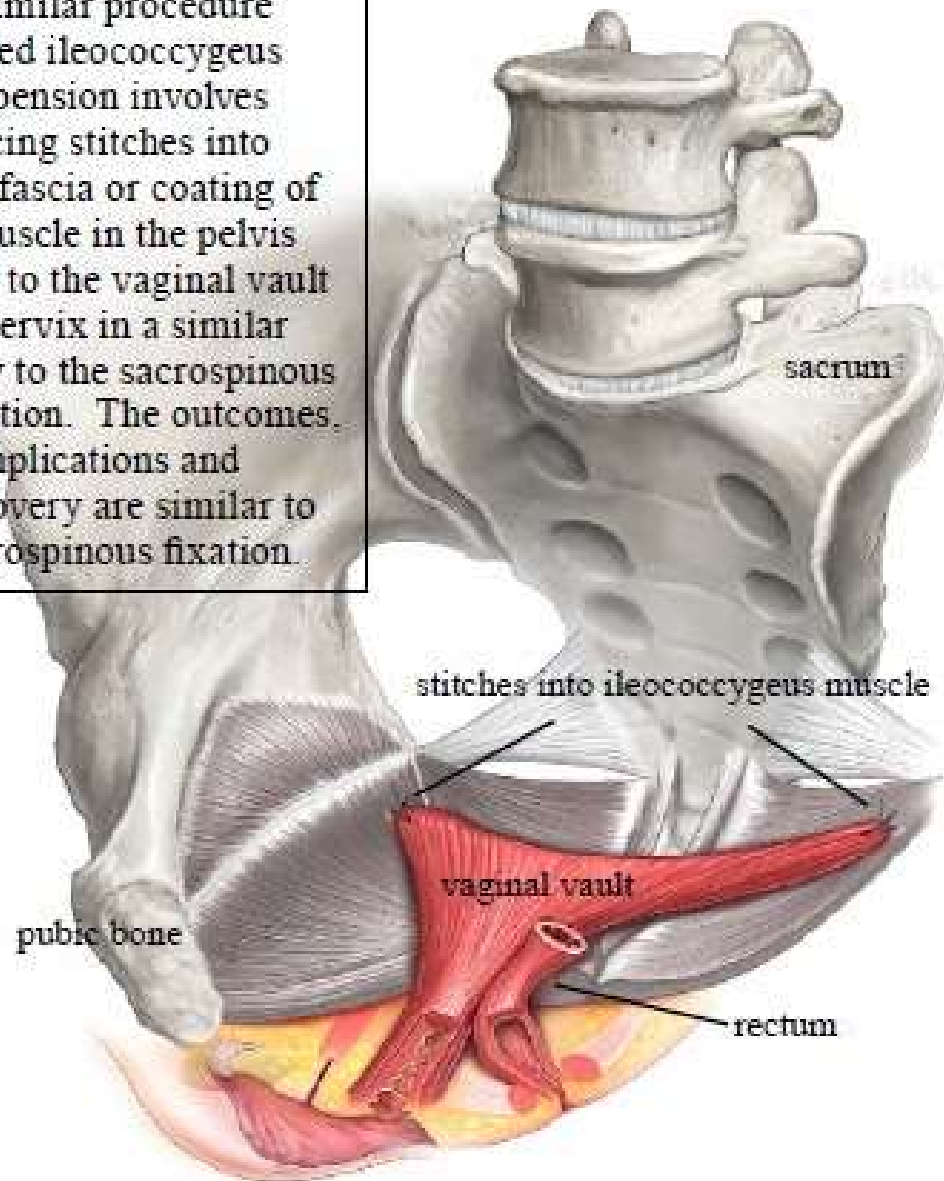


FIGURE 3. Sacrospinous ligament fixation. A. Passage of the suture-capture device; B. Sutures placement; C. Final attachment of the vagina to the ligament complex

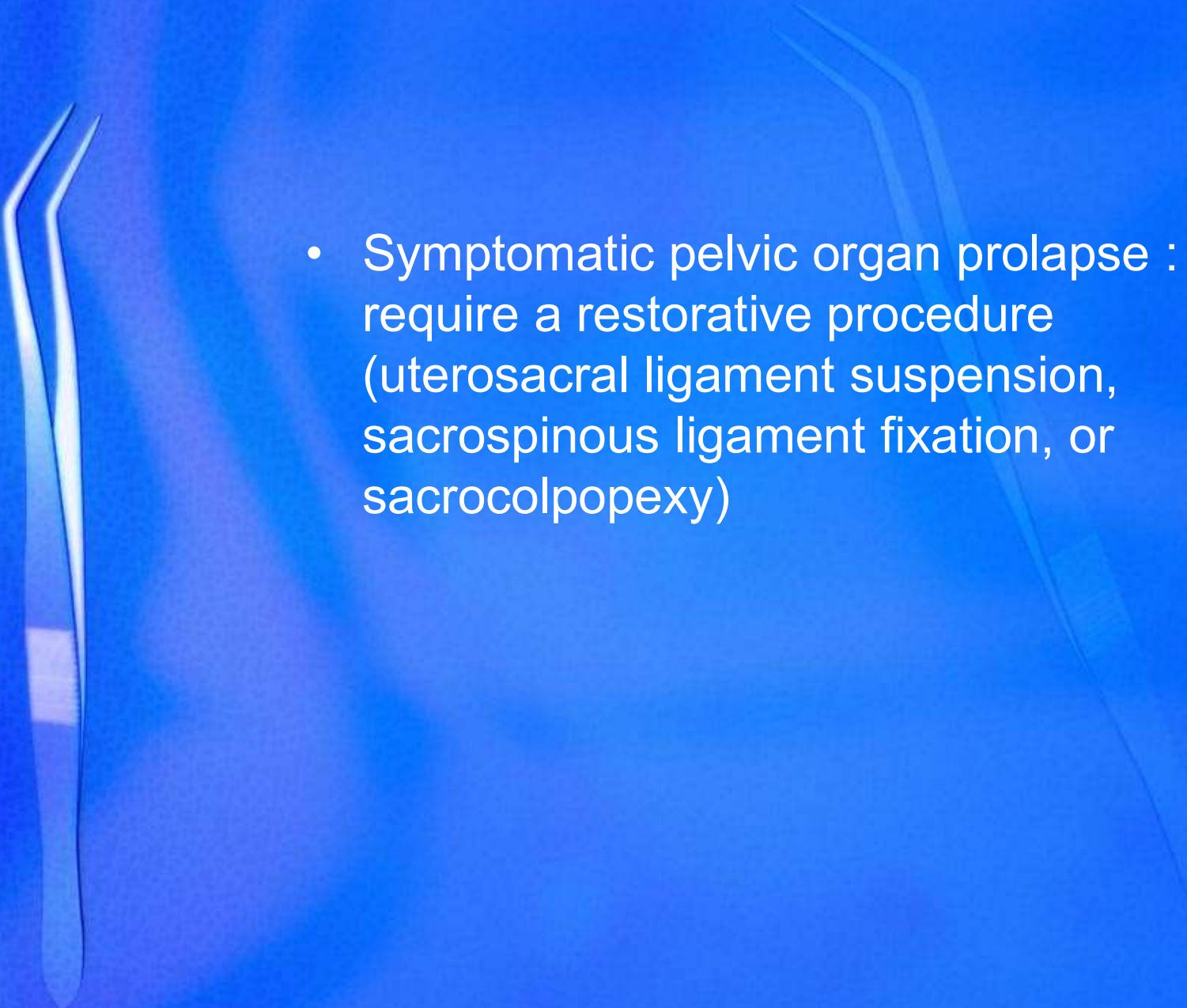
Ileococcygeus Suspension

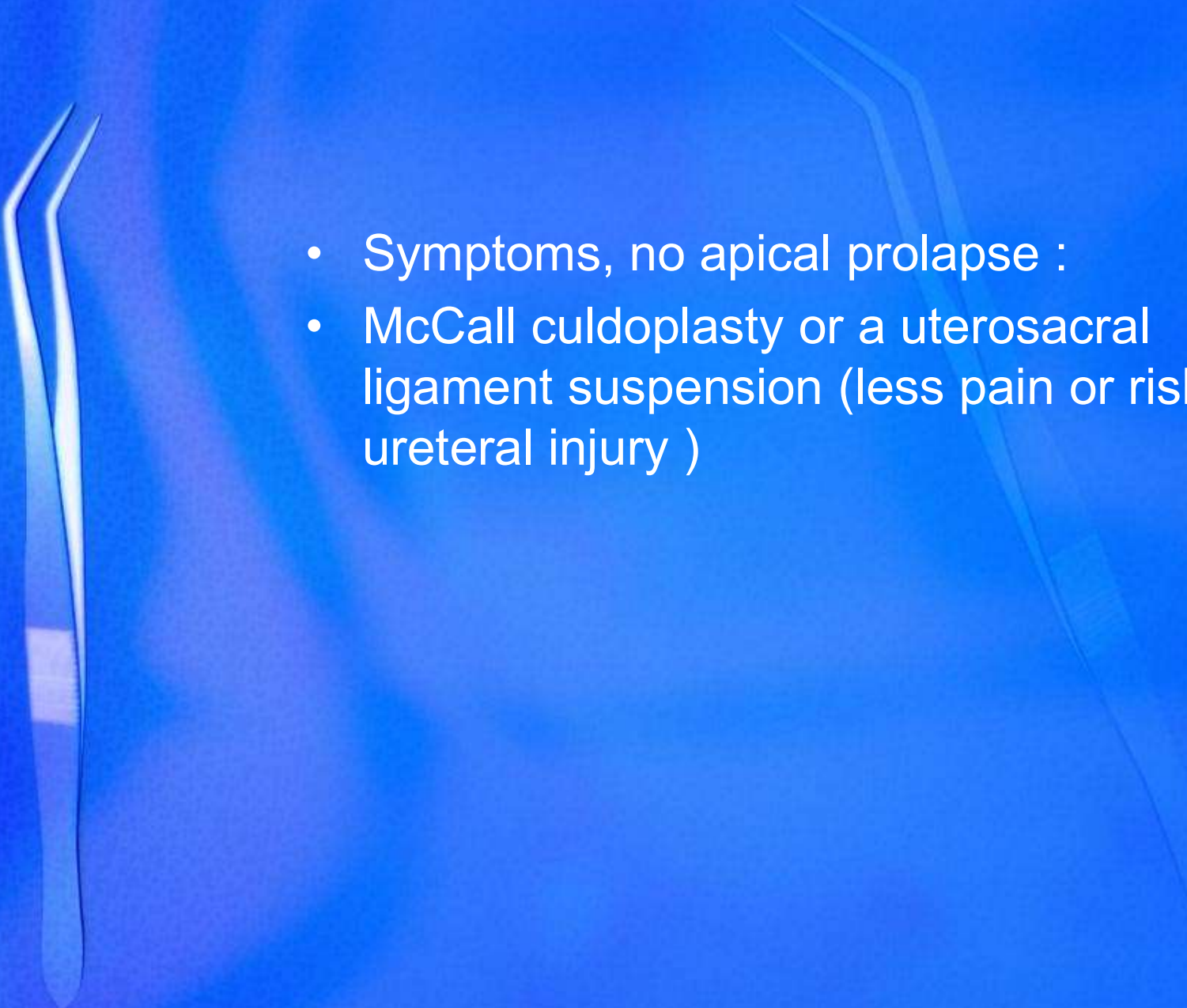
A similar procedure called ileococcygeus suspension involves placing stitches into the fascia or coating of a muscle in the pelvis and to the vaginal vault or cervix in a similar way to the sacrospinous fixation. The outcomes, complications and recovery are similar to sacrospinous fixation.

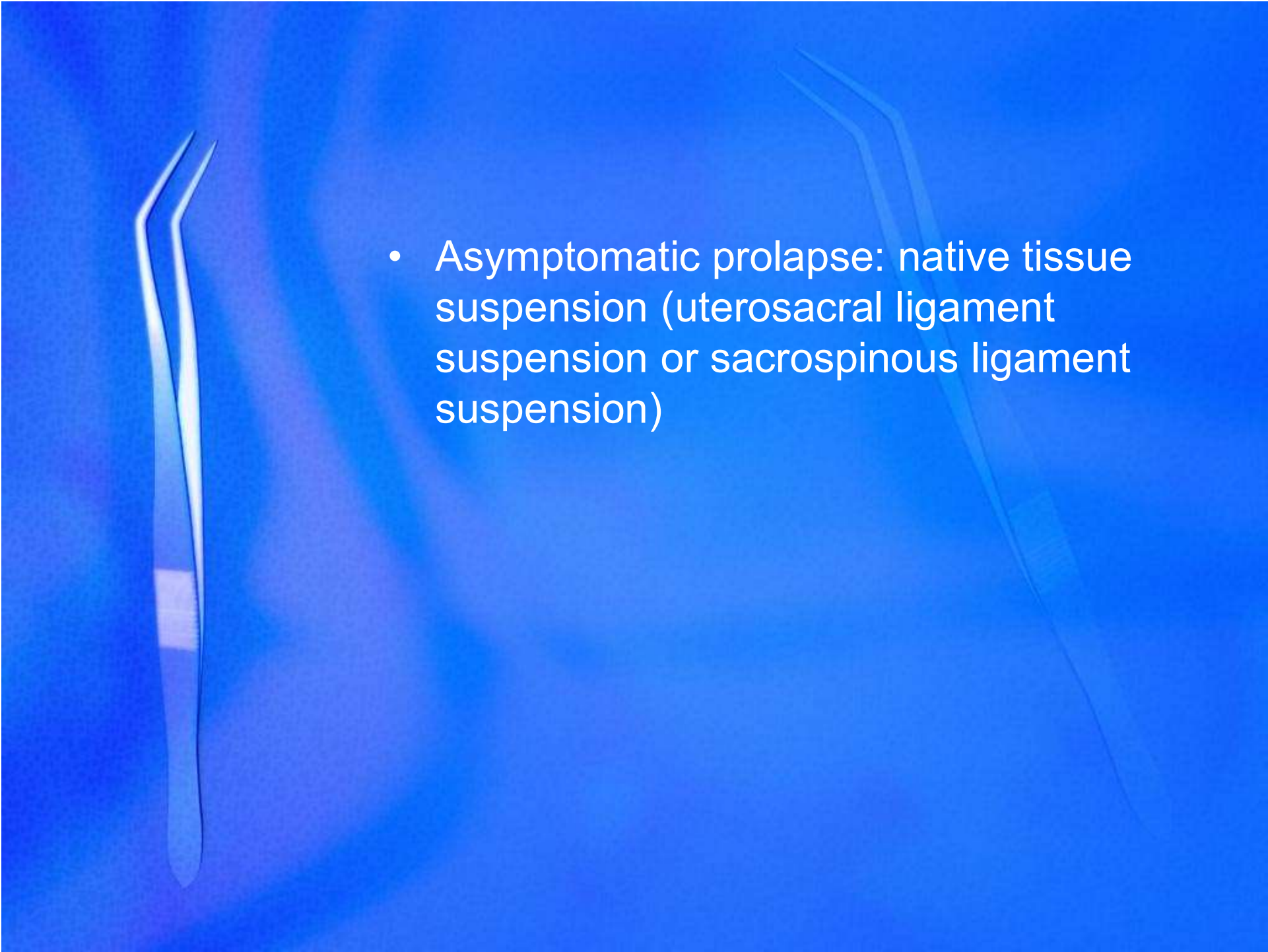


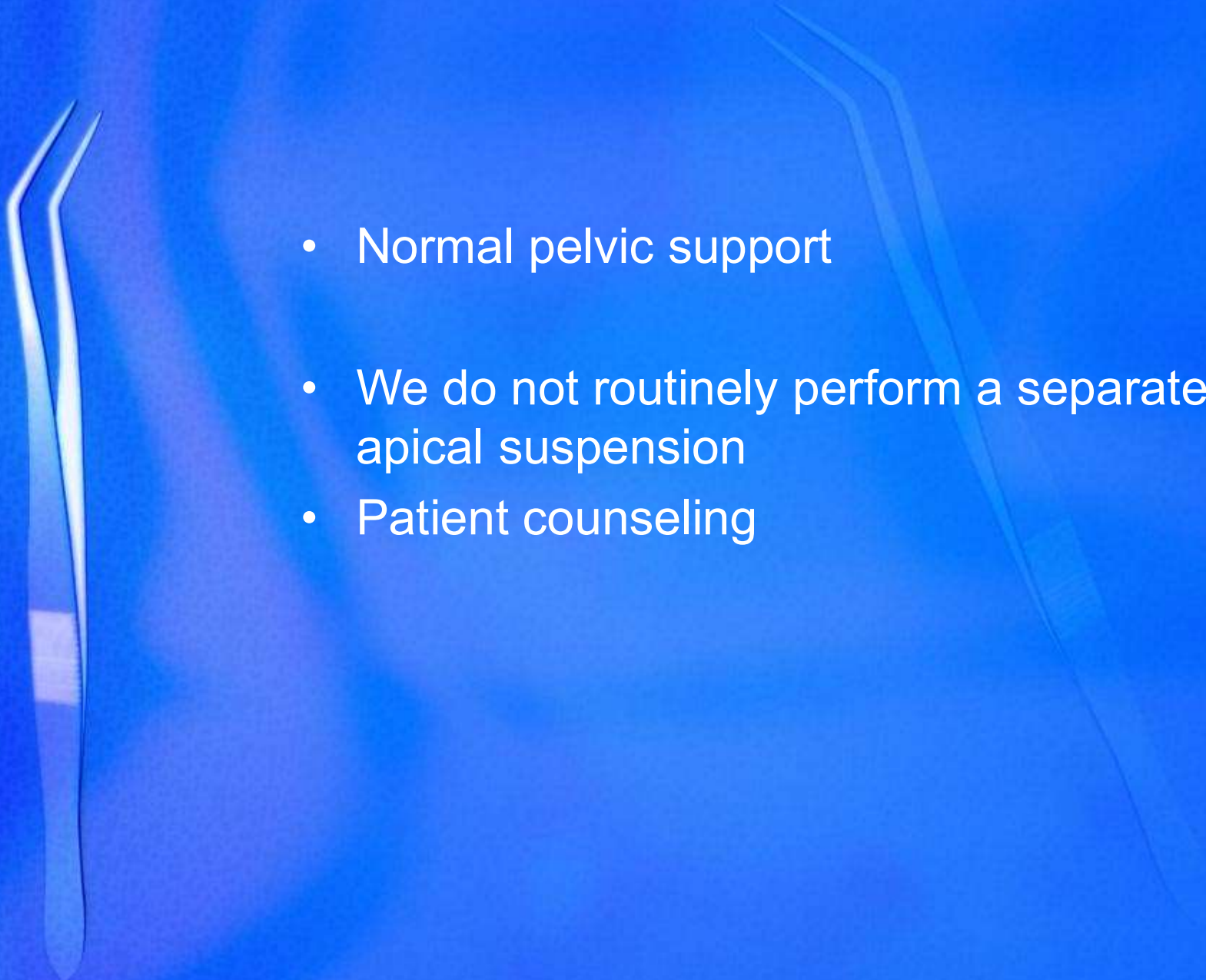
Management


- Before hysterectomy: evaluate women for pelvic organ prolapse
- Symptomatic pelvic organ prolapse
- Symptoms, no apical prolapse
- Asymptomatic prolapse
- Normal pelvic support

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- Symptomatic pelvic organ prolapse : require a restorative procedure (uterosacral ligament suspension, sacrospinous ligament fixation, or sacrocolpopexy)

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- Symptoms, no apical prolapse :
 - McCall culdoplasty or a uterosacral ligament suspension (less pain or risk of ureteral injury)

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- Asymptomatic prolapse: native tissue suspension (uterosacral ligament suspension or sacrospinous ligament suspension)

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- The image contains two diagrams of the female pelvis. The left diagram shows a normal pelvic support structure with a straight line representing the uterine axis. The right diagram shows a pelvic support structure with a curved line representing the uterine axis, indicating a condition that may require apical suspension.
- Normal pelvic support
 - We do not routinely perform a separate apical suspension
 - Patient counseling

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- Prolapse risk factors
 - family history of POP
 - previous vaginal delivery
 - Menopause
 - advancing age
 - prior pelvic surgery
 - connective tissue disorders
 - elevated intra abdominal pressure (obesity, chronic constipation, chronic cough)



- INEFFECTIVE TECHNIQUES

- Supracervical hysterectomy compared with total hysterectomy does not prevent prolapse and should not be performed as a prophylactic procedure



