

TPEA LIFTER – Usage Guidelines for Fixation of the Uterus

GENERAL

The TPEA lifter is an endoscopic retractor consisting of silicon basis, thread, and a needle. The lifter is inserted endoscopically, and the needle is perforating the tissue or organ to be lifted, and subsequently the abdominal wall, where the thread is pulled and fixed as tight as necessary.

The TPEA lifter can be used for any intra-abdominal procedure in any surgical discipline.

These guidelines have been developed specifically for use in operations in which the uterus is involved, based on theoretical considerations and clinical experience.

FIXATION OF THE UTERUS IN ENDOSCOPY

The fixation of the uterus can bring added value to all endoscopic gynecological operations like endometriosis, cystectomies, tubal operations and myomectomies.

Fixation of the uterus can also assist operations of the colon, rectum or the sigmoid whenever the uterus or the ovaries obstruct the overview of the targeted organ.

GUIDELINES FOR FIXATION OF THE UTERUS

1. The needle should penetrate only muscular tissues, these are either the round ligaments or the body of the uterus, depending on the anatomical situation and the requirements.
2. Should the uterus be penetrated, it should be in the midline, going through the myometrium without passing through the cavum uteri. This can be done either diagonally or horizontally depending on the anatomical situation and the needs.
3. When penetrating the abdominal wall, the upper part of the urinary bladder has to be visualized, and the point of the insertion of the needle should be at least 15 mm above the upper limit of the bladder.
4. In a postmenopausal woman the cavum uteri may be penetrated.
5. In case of endometriosis or adhesions the traction of the uterus can be done gradually. After separating adhesions the thread can be pulled again to enable an optimal access.
6. **A needle should never be inserted into the parametrium, as uncontrolled bleeding or hematomata may occur.**
7. Before pulling the thread back into the abdomen, it should be cut at the skin level to prevent insertion of infections.
8. At the end of the operation the points of entry and exit in the round ligaments or the uterus should constantly be observed **until the surgeon is certain that no active bleeding exists.**
9. In case of a mostly unlikely active bleeding after removal of the lifter the bleeding points should be coagulated or sutured. The endoscope should not be removed before the bleeding is stopped completely.
10. It is recommended to watch the entry and exit points while the CO₂ pressure is gradually reduced.