Laparoscopic pectopexy: A randomised comparative clinical trial of standard laparoscopic sacral colpopexy to the new laparoscopic pectopexy – postoperative results

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Major difficulties of sacral colpopexy are ileus and defecation difficulties caused by less space in the lower pelvis. The iliopectineal ligament has been used over a long period of time for Burch operation and the pectopexy does this either. The lateral positioning of the mesh beneath the round ligament has enabled a sufficient fixation without restriction of the bowel. The study shows the good outcome of the technique. Multiple publications show that for the reconstitution of a physiological axis of the vagina regarding size, depth and slant, a sacropexy seems to be the most adequate approach. Since more than 6 years we successfully perform laparoscopic sacral colpopexy in the treatment of vaginal vault prolapse. Our cure rate of 92.1% and our experience of more than 600 procedures led our view to some weak points of the technique and encouraged us in developing a new technique we first described in 10/2010. As obesity is one of the major risks for vault prolapse, it can be a challenge for surgery. The sigmoid colon is often enlarged by fatty tissue. In this case there is less space for the placement of a mesh between the vagina and the sacrum. Consecutively pain or defecation problems can result. Another problem of less space after a sacral colpopexy can be a diverticulosis. The pectopexy uses the iliopectineal ligament on both sides for the mesh fixation so there is no restriction caused by mesh.

A prospective, randomized trial was started to compare the standard laparoscopic sacral colpopexy to the pectopexy. We documented the operation time, the blood loss, body measurements and different complications for the postoperative outcome. The first 72 patients were evaluated and showed no difference in complication rate or hospital stay (4-5 days). No major complication (bowel injury, ileus; mesh infection) were seen in both groups. We saw 1 urinary infection in the pectopexy group. No defecation problems or denovo incontinence was found. The mean operation time was 44.57min for the pectopexy and 52.75min for the sacral colpopexy. Blood loss was documented with 4.8 to 14.75ml. The first data show that the new technique carries no new risks and can be performed as well as the classic "gold standard", the sacral colpopexy. Due to the surgical design there are less problems caused by narrowing the pelvis to be expected in the long term coming out.

Biography

Dr. Karl Guenter Noé has completed his Ph.D at the age of 27 years from Cologne University (Germany). After 5 year of his residency he was employed as senior physician and started his specialization in laparoscopic surgery. Since 2004 he focused on laparoscopic prolapse and cancer surgery. He is the director of the gynecological clinic of Dormagen (attached Hospital of the University of Cologne) and well-known as live-surgeon on German congresses. He developed several modifications and a new laparoscopic surgical technique in prolapse surgery.