Leptin on peritoneal macrophages of patients with endometriosis.

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Source
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Abstract

PROBLEM: The expression of cyclooxygenase (COX)-2 is considered as a marker of macrophage activation and has been implicated in the development of endometriosis. Leptin is an immunomodulator, which may also affect the development of endometriosis. However, how leptin contributes to these pathological processes has not been completely understood. The aim of this study was to investigate the effects of leptin on peritoneal macrophages and its relationship with endometriosis.

METHODS OF STUDY: Peritoneal fluid from 60 women of reproductive age was obtained while they underwent laparoscopy. Forty patients had endometriosis and 20 patients did not have endometriosis. The concentration of leptin in the peritoneal fluid and prostaglandin F(2alpha) levels was measured by ELISA, and the other protein expression using Western blot when peritoneal macrophages were stimulated with leptin.

RESULTS: Concentration of leptin in peritoneal fluid was increased in patients with endometriosis compared with disease-free normal control. Functional leptin receptor was present in peritoneal macrophages. Treatment of peritoneal macrophages with leptin induced COX-2 expression. Production of prostaglandin F(2alpha) by peritoneal macrophages was increased after leptin stimulation in women with endometriosis.

CONCLUSION: Elevated concentration of leptin in peritoneal fluid may contribute to the pathological process of endometriosis through activation of peritoneal macrophages.
Laparoscopic ovarian cystectomy of endometriomas: surgeons’ experience may affect ovarian reserve and live-born rate in infertile patients with in vitro fertilization-intracytoplasmic sperm injection.

Yu HT, Huang HY, Soong YK, Lee CL, Chao A, Wang CJ.

Abstract

OBJECTIVE: To assess whether the laparoscopist’s experience can affect ovarian reserve and pregnancy outcome in vitro fertilization-intracytoplasmic sperm injection (IVF-ICSI) patients who previously underwent laparoscopic conservative treatment for ovarian endometriomas.

STUDY DESIGN: One hundred and forty-nine IVF-ICSI cycles with infertile patients who previously underwent laparoscopic conservative treatment for ovarian endometriomas were enrolled. There were 76 cycles with an inexperienced surgeon and 73 cycles with an experienced surgeon.

RESULTS: The number of antral follicle count (7.5 ± 3.8 vs. 9.6 ± 6.6; p=0.011), and live-born rate per cycle (9.3% vs. 32.9%; p<0.001) were significantly lower in the inexperienced group comparing with the experienced group. However, the mean number of oocytes, fertilization rate, mean number of embryos transferred, rate of good-quality embryos transferred, implantation rate and clinical pregnancy were similar between both groups.

CONCLUSIONS: The experience of the laparoscopist may affect ovarian reserve and live-born rate after treating ovarian endometrioma in infertile women with IVF-ICSI.
Laparoscopic management of placenta increta after late first-trimester dilation and evacuation manifesting as an unusual uterine mass.

Wang YL, Su TH, Huang WC, Weng SS.

Abstract

Placenta increta is a rare and potentially life-threatening complication of pregnancy. The initial symptoms are generally vaginal bleeding during difficult placental removal in the third trimester. However, placenta increta may complicate first- and early second-trimester pregnancy loss. The diagnosis may be difficult during early pregnancy because the lesion is difficult to identify. Herein is reported the case of a woman with a diagnosis of placenta increta that caused prolonged bleeding after a late first-trimester abortion and manifested as an unusual lower segment uterine mass. Management included laparoscopy, and the placental tissue was completely removed successfully and uneventfully.
Comparing uterine fibroids treated by myomectomy through traditional laparotomy and 2 modified approaches: ultraminilaparotomy and laparoscopically assisted ultraminilaparotomy.

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Abstract

OBJECTIVE: We sought to compare myomectomy performed by laparotomy (LT), and 2 other modified approaches: ultraminilaparotomy (UMLT) and laparoscopically assisted UMLT for uterine fibroids with a size <8 cm and the number <5.

STUDY DESIGN: A cohort study, including 79 (35.3%) women in the LT group, 71 (31.7%) in the UMLT group, and 74 (33.0%) in the laparoscopically assisted UMLT group, was conducted. The outcome was measured by comparing surgical parameters, immediate postoperative recovery, and therapeutic outcomes.

RESULTS: The median follow-up was 52 months with similar recurrence rates in the 3 groups. The modified approaches had advantages not only in the surgical parameters, but also in postoperative recovery, compared to LT (all P < .05).

CONCLUSION: UMLT and laparoscopically assisted UMLT can be used successfully in place of LT in the management of uterine fibroids.