Clinical decisions in the management of infertility associated with endometriosis are difficult because many clinical decision points have not been evaluated in randomized clinical trials. Laparoscopy is the gold standard for diagnosis of endometriosis and the decision to perform it should take into consideration factors such as patient’s age, duration of infertility, family history, pelvic pain, pelvic mass on ultrasound. Conservative surgical treatment of endometriosis must be directed to reproductive function recuperation by eliminating implants and reconstruction of the altered pelvic anatomy. Laparoscopic treatment of endometriosis as compared with laparotomy allows short time of hospitalization, faster recovery, smaller incisions. Surgical treatment of endometriosis associated infertility includes ablation of endometriotic implants and adhesions to improve fertility in minimal and mild endometriosis. In cases of endometriomas 4 cm or larger, laparoscopic cystectomy improves fertility compared with drainage and cauteronization. Laparoscopic cystectomy must be carefully performed to avoid damage of normal ovarian tissue, preserving ovarian reserve. Superovulation with intrauterine insemination may be offered after laparoscopy, although expectant management is an option for younger women. In vitro fertilization should be offered in cases of severe tubo-peritoneal factor, severe male factor, or in cases of failure to other treatments. Among patients with severe endometriosis, 3 to 6 months of GnRH agonists treatment should be considered.

Keywords
Endometriosis, infertility, treatment, assisted reproduction.