## **Abstract**

Endometriosis is a chronic disease frequently associated with female infertility. The choice of treatment in case of endometriosis is one of the most discussed topics in Reproductive Medicine. The approach to the patient with endometriosis and infertility should be tailored based on different parameters. The localization of the disease, the severity of symptoms and the age of the patient are just some of them. Management options include surgery, in-vitro fertilization (IVF), or a combination of both. Data, mostly uncontrolled, would favour surgery at any stage of endometriosis, increasing the chances of natural conception compared to expectant management. Laparoscopic excision of the ovarian endometrioma should be the treatment of choice when there is associated pain. Surgery should be performed following appropriate techniques to reduce the possible damage to the ovarian reserve. Pregnancy rates around 50% have been consistently reported after surgery, which compare favorably with those obtained with IVF. IVF, on the other hand, may be preferred in case of associated male or tubal factor, in case of a reduced ovarian reserve, or if previous surgery has failed, particularly if there is no associated pain, and when the ultrasonographic features of the ovarian cyst are reassuring. Sometimes IVF may be preceded by surgery, when a difficult access to follicles at pick-up, due to the size and location of the ovarian cyst, or to severe adhesions, is anticipated. Due to the lack of solid evidence in the scenario of endometriosisassociated infertility, robust data from randomized clinical trials (RCTs) are strongly needed.