MODERN MANAGEMENT OF ENDOMETRIOMA ASSOCIATED INFERTILITY, SURGERY OR ART?

Alborzi S¹
¹Professor and Head of Gynecologic Endoscopy Ward, Department of Obstetrics and Gynecology, Shiraz University of Medical Sciences, Shiraz, Iran

Introduction
Endometriosis is one of the most common causes of infertility. However, there is still much debate regarding the best management for different presentations of this disease, especially those patients who presented with endometrioma. Some surveys showed that the majority of practitioners performed surgery for their patients as the first line of treatment. While other reports questioned this approach and its possible harmful effects, especially on ovarian reserve, and recommended direct ART. In this review the aim is to find the best management for this problem by carefully reviewing the literature.

Material and Methods
A systemic review with electronic searches of PubMed, MEDLINE and Embase from year 2000 till present was conducted to identify articles on endometrioma and its management.

Results
At the beginning of the new millennium laparoscopic surgery for endometrioma was widely practiced but there was no universal technique of choice. By the year 2006, two RCTs and one meta-analysis showed that the technique of choice was cystectomy, considering recurrence of signs and symptoms, and pregnancy rate. In the last decade some reports revealed a decrease in ovarian reserve tests and especially AMH levels after this kind of surgery. Although some modifications of the cystectomy technique were presented, others recommended that ART should be offered as the first line of treatment for endometrioma, since endometrioma did not affect the success of ART. But considering the cost of ART and pregnancy rate of 30-50 percent after surgery alone, it seems that the 'all ART' approach is rather too radical. There is no single RCT in the literature comparing laparoscopic surgery with ART.

Conclusion
Until careful RCTs with a good level of evidence appear in the literature, patients with endometrioma and infertility should be individualized according to unilateral versus bilateral cysts, ovarian reserve tests especially AMH levels, their age, history of previous surgery for endometrioma, and other causes for infertility such as severe male factor. In a young infertile patient presented with unilateral endometrioma with good AMH level and without concomitant male factor, it is still prudent to recommend surgery rather than ART, especially in the presence of pain symptoms.