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Preservation of Ovarian Reserve after Laparoscopic Cystectomy

Christos lavazzo¹, Nikolaos Vrachnis², Ioannis D. Gkeakes^{3,4}

Department of Gynaecological Oncology, Metaxa Cancer Hospital, Piraeus, Greece, ²Third Department of Obstetrics and Gynaecology, National and Kapodistrian University of Athens Medical School, Attikon Hospital, Athens, Greece, 3Athens Colorectal Laboratory, Athens, Greece, ⁴Department of Colorectal Surgery, Royal Devon and Exeter NHS Foundation Trust, Exeter, UK

Dear Editor,

With great deal of interest we read the article entitled "Comparison of serum anti-Mullerian hormone-level changes in single-port laparoscopic endometriotic and non-endometriotic ovarian cyst enucleations" by Cabiscuelas et al. [1].

Ovarian reserve measured by levels of anti-Mullerian hormone (AMH) can be affected by surgical technique as presented by the authors and such a postoperative decrease of AMH levels can be higher in patients treated for endometriosis. Although, a Cochrane review showed that laparoscopic approach is the preferable technique to prevent endometriosis recurrence [2]. A recent metanalysis revealed that the postoperative decrease of AMH levels was greater in endometriomas compared to other benign ovarian cysts and the decline was more significant in bilateral endometriomas [3]. Moreover, the same metanalysis highlighted the role of surgical technique in the inflammatory damage of the ovarian cortex (especially the use of bipolar energy haemostasis versus the use of sutures and haemostatic agents) [3].

We would like to highlight some ways to preserve ovarian reserve after laparoscopic cystectomy for endometriomas. A recent randomized controlled trial revealed that perioperative use of dienogest has better outcomes in ovarian reserve after cystectomy of endometrioma compared to perioperative use of GnRH analogues [4]. More specifically, in the arm using GnRH analogues, all the patients had less than 70% of the preoperative AMH levels, whereas 60% of the patients treated with dienogest achieved to have at least 70% of the preoperative AMH levels.

Other methods to preserve ovarian reserve include either cyst deroofing [5] or use of Surgicel® [6]; however, their role is questionable in preventing recurrence.

Once again, we would like to thank the authors for their excellent contribution.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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Address for Correspondence: Ioannis D. Gkegkes, Department of Colorectal Surgery, Royal Devon and Exeter NHS Foundation Trust, 17c James House, Residential Village, EX2 5DS, Bovemoors Lane, Exeter, UK

Tel: 44-7444251353, E-mail: ioannisgkegkes@gmail.com, ORCID: https://orcid.org/0000-0001-8637-5679



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