

Ovarian Reserve Before and After Cystectomy in Non Endometriotic Ovarian Cysts

Thesis

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Benign ovarian cysts develop within the ovarian parenchyma. Both, the cyst in itself and the cystectomy influence the ovarian reserve . Damage to the ovarian reserve is not only due to the inadvertent removal of healthy ovarian tissue, but also vascular compromise .

The aim of our study was to investigate serum levels of Follicular Stimulating Hormone (FSH), Luteinizing Hormone (LH), and Anti-Mullerian Hormone (AMH) and changes in antral follicular count as an indicator of ovarian reserve before and after ovarian cystectomy to study effect of ovarian surgery on ovarian reserve.

50 patients with dermoid cyst, serous cystadenoma, and mucinous cystadenoma were recruited. Measurement of serum levels of Follicular Stimulating Hormone (FSH), Luteinizing Hormone (LH), and Anti-Mullerian Hormone (AMH) and changes in antral follicular count performed prior to surgery, and 3 months after ovarian cystectomy.

There was a statistical significant higher mean of postoperative FSH level in cyst with mucinous pathological type with p-value 0.03. But no difference in mean postoperative LH, or AMH level between different pathological type of cysts with p-value >0.05. On the other hands there was no statistical significant difference in postoperative levels of ovarian reserve (FSH, LH and AMH levels) with p-value >0.05 in different cystic characteristics (side, laterality, and size).

Ovarian cystectomy for benign ovarian cysts resulted in gradual improvement on postoperative day 90. The surgical approach can cause definite harm to the ovarian reserve with no privilege recorded of laparoscopy over laparotomy as regard conservation of ovarian reserve

