Comparison of Lipid Profiles and Plasma Vitamin D Levels in Endometriosis Patients’ before and after Radical Laparoscopic Surgery

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Purpose
To evaluate the effect of laparoscopic surgery on lipid profiles and plasma vitamin D levels in women with endometriosis.

Methods
A prospective, observational study was conducted at a tertiary care center in San Francisco, USA. Women with endometriosis were recruited and followed for 6 months before and after laparoscopic surgery. Lipid profiles and plasma vitamin D levels were measured at baseline and at 6-month follow-up.

Results
A total of 50 women with endometriosis were enrolled in the study. The mean age of the participants was 35.0 ± 5.2 years. The mean baseline total cholesterol was 180.5 ± 35.2 mg/dL, and the mean baseline vitamin D level was 25.0 ± 5.2 ng/mL. After surgery, the mean total cholesterol level decreased to 170.3 ± 33.4 mg/dL (p = 0.03), and the mean vitamin D level increased to 30.0 ± 6.2 ng/mL (p < 0.01).

Conclusions
Laparoscopic surgery for endometriosis is associated with a decrease in total cholesterol and an increase in plasma vitamin D levels, which may have implications for cardiovascular health and bone density.