

Adenomyosis is an independent risk factor for complications in deep endometriosis laparoscopic surgery

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Introduction

Deep endometriosis (DE) occurs in 15-30% of patients with endometriosis and is associated with concomitant adenomyosis in around 25-49% of cases. There are no data about the effect of the presence of adenomyosis in terms of surgical outcomes and complications. Thus, the aim of the present study was to evaluate the impact of adenomyosis on surgical complications in women with deep endometriosis undergoing laparoscopic surgery.

Materials and Methods:

A retrospective cohort study including women referred to the endometriosis unit of a referral teaching hospital. Two expert sonographers preoperatively diagnosed DE and adenomyosis. DE was defined according to the criteria of the International Deep Endometriosis Analysis group. Adenomyosis was considered when 3 or more ultrasound criteria of the Morphological Uterus Sonographic Assessment group were present. Demographical variables, current medical treatment, symptoms, DE location, surgical time, hospital stay and difference in pre and post hemoglobin levels were collected. The Clavien-Dindo classification was used to assess surgical complications, and multivariate analysis was performed to compare patients with and without adenomyosis.

Conclusions

Adenomyosis increases the risk of presenting complications in DE surgery after controlling for demographic, clinical and surgical factors and should be considered an independent preoperative risk factor of surgical complications.

Results

157 DE patients were included into the study; 77 (49.05%) had adenomyosis according to transvaginal ultrasound (TVS) and were classified in the A group, and 80 (50.95%) had no adenomyosis and were classified in the noA group. Adenomyosis was associated with a higher rate of surgical complications: 33.76% (A group) vs. 12.50% (noA group) ($p < 0.001$). Multivariate analysis showed a 4.56-fold increased risk of presenting complications in women with adenomyosis (CI: 1.90-11.30; $p = 0.001$) independently of undergoing hysterectomy. There was a statistically significant association between the number of criteria of adenomyosis present in each patient and the proportion of patients presenting surgical complications ($p < 0.001$).

