

Risk factors for recurrence of borderline ovarian tumors in France: A multicenter retrospective study by the FRANCOGYN group

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July 16, 2020

Abstract

Background: Borderline ovarian tumors (BOTs) although rare, have shown an increase in the incidence worldwide. Although the survival rate is high, the recurrence rate is estimated to be between 5% and 34%. The objective of this study was to identify risk factors for recurrence of BOTs. **Methods:** This retrospective multicenter study included 493 patients treated surgically for BOT between January 2001 and December 2018. **Results:** Thirty-seven patients showed recurrence (group R, 7.5%), while 456 did not (group NR, 92.5%). With an average follow-up of 30.5 months (1-276), the overall recurrence rate was 7.5%. Recurrence rates for the BOT and invasive types were 5.7% (n=28) and 1.4% (n=7), respectively. The mean time to recurrence was 44.1 (3-251) months. Univariate analysis showed that age at diagnosis, type of surgical procedure, histological type, and FIGO stage were factors influencing recurrence. Multivariate analysis showed that the risk factors for recurrence of BOT were conservative treatment (OR=7 [95% CI 3.01-16.23]; p<0.05) and advanced FIGO stage (OR=5.86 [95% CI 2.21-15.5]; p<0.05). **Conclusion:** To the best of our knowledge, this multicenter study was one of the largest studies on the risk factors for BOT recurrence. Conservative treatment and advanced FIGO stage were identified as risk factors for BOT recurrence. These results reinforce the need for restaging of patients who did not have an optimal initial surgical staging so as not to avoid missing a tumor in the advanced stage. Referral to a surgical oncology center is suggested to optimize overall patient management.

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