

Risk factors of epithelial ovarian carcinomas among women with endometriosis: a systematic review

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Abstract

Introduction: To evaluate the published literature on epidemiologic risk factors for epithelial ovarian cancer (EOC) among women with a diagnosis of endometriosis.

Material and methods: A systematic literature search was conducted in PubMed and Scopus. Studies comparing epidemiologic risk factors of EOC among women with endometriosis were included. A quality assessment was conducted using the Newcastle-Ottawa Scale.

Results: Eight of 794 articles met the inclusion criteria; all were case-control studies. A lower risk of EOC was observed in women with documented complete surgical excision of endometriotic tissue and suggested among women with unilateral oophorectomy. The use of oral contraceptives (≥ 10 years) may be associated with a lower risk of EOC among women with endometriosis, whereas older age at

endometriosis diagnosis (≥ 45 years, pre- or postmenopausal), nulliparity, hyperestrogenism (endogenous or exogenous), pre-menopausal status at endometriosis diagnosis solid compartments as well as larger size of endometrioma (≥ 9 cm in diameter at endometriosis diagnosis) were all associated with an increased risk of ovarian cancer.

Conclusion: A subgroup of women with endometriosis characterized by endometriosis observed through surgery or imaging after the age of 45 years, nulliparity, post-menopausal status at endometriosis diagnosis, larger size of endometrioma (> 9 cm) at endometriosis diagnosis, hyperestrogenism (endogenous or exogenous) and/or cysts with solid compartments may have an elevated risk of EOC. However, due to the limited number and size of studies in this area we cannot draw definitive conclusions. Further research into a risk factor profile among women with endometriosis is needed before clear recommendations can be made.