

Fatigue - a symptom in endometriosis.

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Abstract

STUDY QUESTION: Is fatigue a frequent symptom of endometriosis?

SUMMARY ANSWER: Fatigue is an underestimated symptom of endometriosis as it affects the majority of women with endometriosis, but it is not widely discussed in literature.

WHAT IS KNOWN ALREADY: Fatigue can be a symptom of endometriosis causing major distress impacting the daily activities and quality of life of women with endometriosis. However, few studies with large sample sizes have investigated fatigue as a symptom of endometriosis.

STUDY DESIGN, SIZE, DURATION: The study was designed as a multi-center matched case-control study. Recruitment took place at hospitals and private practices in Switzerland, Germany and Austria between 2010 and 2016. Data was collected from 1120 women, 560 of them with endometriosis. The women with endometriosis were matched to 560 control women in regard to age ± 3 years and ethnic background.

PARTICIPANTS/MATERIALS, SETTING, METHODS: Diagnosis of women with endometriosis had to be surgically and histologically confirmed. Surgical exclusion or absence of any endometriosis-identifying symptoms was required for control subjects. Materials included surgical and histological reports as well as data retrieved from a self-administered questionnaire. This study focused on the symptom fatigue in endometriosis. Relationships of variables were established by regression analysis and associations were quantified as odds ratios.

MAIN RESULTS AND THE ROLE OF CHANCE: Frequent fatigue was experienced by a majority of women diagnosed with endometriosis (50.7% versus 22.4% in control women, $P < 0.001$). Fatigue in endometriosis was associated with insomnia (OR: 7.31, CI: 4.62-11.56, $P < 0.001$), depression (OR: 4.45, CI: 2.76-7.19, $P < 0.001$), pain (OR: 2.22, CI: 1.52-3.23, $P < 0.001$), and occupational stress (OR: 1.45, CI: 1.02-2.07, $P = 0.037$), but was independent of age, time since first diagnosis and stage of the disease.

LIMITATIONS, REASONS FOR CAUTION: Women with asymptomatic endometriosis cannot be excluded in the control group which would lead to underestimation of our results. The study's design allows no evaluation of causal effects.

WIDER IMPLICATIONS OF THE FINDINGS: As fatigue is experienced by numerous women with endometriosis, it needs to be addressed in the discussion of management and treatment of the disease. In addition to treating endometriosis, it would be beneficial to reduce insomnia, depression, pain and occupational stress in order to better manage fatigue.