**Abstract**

**Objectives:** To assess the value of a self-completed questionnaire based on patients' verbal descriptors of pelvic painful symptoms to identify women with endometriosis.

**Design:** Prospective 1:2 nonmatched case-control study.

**Setting:** Three French endometriosis referral centers.

**Patient(s):** Endometriosis cases were women aged 18-45 years with endometriosis confirmed by histology. Controls were as follows: asymptomatic women attending a gynecologic consultation for routine examination; women without evidence of endometriosis consulting for pain/infertility; and population-based controls from the same urban locations.

**Intervention(s):** All women completed the 21-item yes/no questionnaire about painful symptoms.

**Main outcome measure(s):** The area under the receiver operating characteristic curve of the full question set model based on binary logistic regression and the diagnostic accuracy of low- and high-risk classification rules based on selected threshold of the prediction model.

**Result(s):** We included 105 cases and 197 controls (45 asymptomatic consultation-based controls, 66 women without endometriosis consulting for pain/infertility, and 86 population-based controls). The full question set prediction model, including age, had an area under the receiver operating characteristic curve of 0.92 (95% confidence interval, 0.87-0.95) after internal validation. The high-risk classification rule had a specificity of 98.0% and a positive likelihood ratio of 30.5. The low-risk classification rule had a sensitivity of 98.1% and a negative likelihood ratio of 0.03. For a hypothesized pretest prevalence of 10%, the high- and low-risk prediction rules ascertained endometriosis with posttest probability rates of 77.2% and 0.3%, respectively.

**Conclusion(s):** A self-completed patient-centered questionnaire can identify women at low or high risk of endometriosis with a high diagnostic accuracy and, thus, may help early identification of women with endometriosis.