**16.Endometriosis: A Retrospective Analysis on Diagnostic Data in a Cohort of 4,401 Patients**

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Abstract

Background/aim: Endometriosis is a gynecological estrogen-dependent inflammatory disease due to ectopic endometrial tissue and often associated with pelvic pain. Despite its high prevalence, there are still uncertainties about its pathogenesis, diagnosis, and therapy.

Patients and methods: This study presents a retrospective study conducted on 4,401 endometriosis patients, 584 of which underwent laparoscopic procedures. The archived data about clinical signs, magnetic resonance imaging (MRI) results, topography of the endometriosis lesions (obtained via laparoscopy) associated diseases, sample analysis and histological findings were analyzed. Next, the statistical associations between the information for each case, provided by these diagnostic tools were determined.

Results: MRI is the most sensitive and specific diagnostic system for ovarian lesions, but poor in sensitivity and specificity for deep endometriosis lesions and not indicated for peritoneal lesions which remain the exclusive prerogative of laparoscopy. Clinical signs are essential for diagnosing deep lesions. The Ca125 and Ca19.9 markers have a poor reliability and their negativity in symptomatic patients has no clinical value, while in positive cases it could probably be used as a monitoring parameter.

Conclusion: The results generated will help provide an accurate picture of the topography and distribution of endometriotic lesions. Correlation analyses between the data generated by the clinical-instrumental examinations and those on the site of the disease identified by laparoscopy, allow to define the predictive value of the clinical-instrumental signs in the diagnosis and localization of endometriotic disease.

Keywords: Endometriosis; MRI; clinical signs; correlation analysis; laparoscopy; non- invasive diagnosis; retrospective study; serum biomarkers.