

Predisposition of subtle endometriotic lesions predominantly on the left side assessed by transvaginal hydrolaparoscopy (THL)

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ARTICLE INFO

Article history:

Received 23 January 2011

Received in revised form 4 April 2011

Accepted 30 April 2011

Keywords:

Transvaginal hydrolaparoscopy (THL)

Endometriosis

Adenomyosis

Utero-tubal transport disorder

ABSTRACT

Objective: Endometriosis is one of the most frequent gynaecological disorders being associated with infertility. Hence, the early detection of endometriosis in infertility patients is of importance for the treatment modalities in infertility. Transvaginal hydrolaparoscopy (THL) offers an accurate, safe and quick diagnostic tool, not only for the evaluation of the fallopian tubes but also for the detection of very subtle endometriotic lesions in the early stages of endometriosis.

Study design: Between January 2008 and January 2010, we conducted a study in order to evaluate the prevalence, extent and localisation of endometriosis via the new technique of THL in infertility patients. 239 patients with a mean age of 33.9 years underwent THL after having given informed consent.

Results: In 237 patients, access to the cul-de-sac was successfully achieved. Endometriosis was detected in 77 of 237 cases (32.5%). In 85.7% of cases, the endometriotic lesions were classified as very small (ASRM stage I°). Predominantly, the small lesions were found merely on the left side of the patient's peritoneal cavity: in 43 cases (55.8%), endometriosis was detected strictly on the left side, whereas the disease was detected on the right side in only 5 patients (6.5%). In 29 patients, endometriosis could be detected in both sides of the pelvis (37.7%). The differences in the side-dependent distribution were statistically highly significant ($p < 0.0001$). In most of the cases, the subtle endometriotic lesions affected the ovarian surface superficially (53.5%) or the peritoneum of the lateral pelvic wall (25.6%).

Conclusions: These data clearly indicate that there is a high prevalence of endometriosis in patients with infertility. THL is an accurate, safe and quick method for a thorough examination of the female pelvis besides the patency of the fallopian tubes. The high prevalence of left-sided subtle endometriotic lesions must be interpreted that during THL a very early process in the development of endometriosis can be observed. Even minimal to mild endometriosis might lead to a significant restriction in uterotubal transport capacity whose integrity is directly correlated to normal pregnancy rates. The extent of the accompanying adenomyosis is directly correlated to the loss of intact uterotubal transport capacity.