

The Pseudo-Tumoral Appearance of Chronic Endometritis: Case Report.

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Abstract: Chronic endometritis is a rare condition characterized by a plasma cell infiltrate in the endometrium. In some cases, this infiltrate can be significant, mimicking a tumoral pathology, particularly lymphomas. We report a case of a 75-year-old woman who presented with postmenopausal leukorrhea and a polypoid appearance of the endometrium on imaging. Biopsy revealed endometritis without malignancy, but the histological appearance was compatible with chronic endometritis, requiring further immunohistochemistry to rule out an underlying lymphoma. The final diagnosis was chronic endometritis. The diagnosis of lymphoma should be considered in the presence of an inflammatory infiltrate of significant intensity, extension to the superficial myometrium, and destruction of endometrial glands. Diagnosis can only be confirmed anatomopathologically, and immunohistochemistry is required to rule out an underlying lymphoma.

Keywords: chronic endometritis, lymphoma, plasma cells, immunohistochemistry, differential diagnosis.

INTRODUCTION:

Chronic endometritis is a relatively rare condition, affecting mostly genitally active women. It is characterized by the presence of a more or less diffuse plasma cell infiltrate in the endometrium. In rare cases, this infiltrate may be so significant that it appears as a true intrauterine mass, raising the difficulty of making a differential diagnosis with tumoral pathologies, especially lymphomas.

CASE REPORT:

The patient was 75 years old, with a history of ischemic heart disease under treatment, a hemorrhagic stroke under treatment, had undergone a cholecystectomy 20 years ago, and was admitted for postmenopausal leukorrhea.

Clinical examination found a conscious patient, hemodynamically and respiratory stable, WHO 1. The obstetrical examination found a macroscopically normal cervix and fetid leucorrhoea from the endocervix.

The vaginal examination found an enlarged uterus with a normal cervix.

The patient underwent a pelvic ultrasound exam showing a small process in the proximal part of the endocervical stroma with a stenosing aspect responsible for a significant intra-cavitary uterine fluid retention on a myomatous and retroverted uterus, some external iliac and latero-aortic lymph nodes and adenopathies with a small infra-centimetric axis.

The patient underwent a diagnostic hysteroscopy showing a very suspicious endocavitary process with anarchic vessels on the surface. A biopsy was performed showing lesions of endometritis without signs of malignancy within the limits of the sample presented.

The patient underwent a diagnostic hysterectomy with multiple biopsies in view of the clinical and anatomopathological discordance.

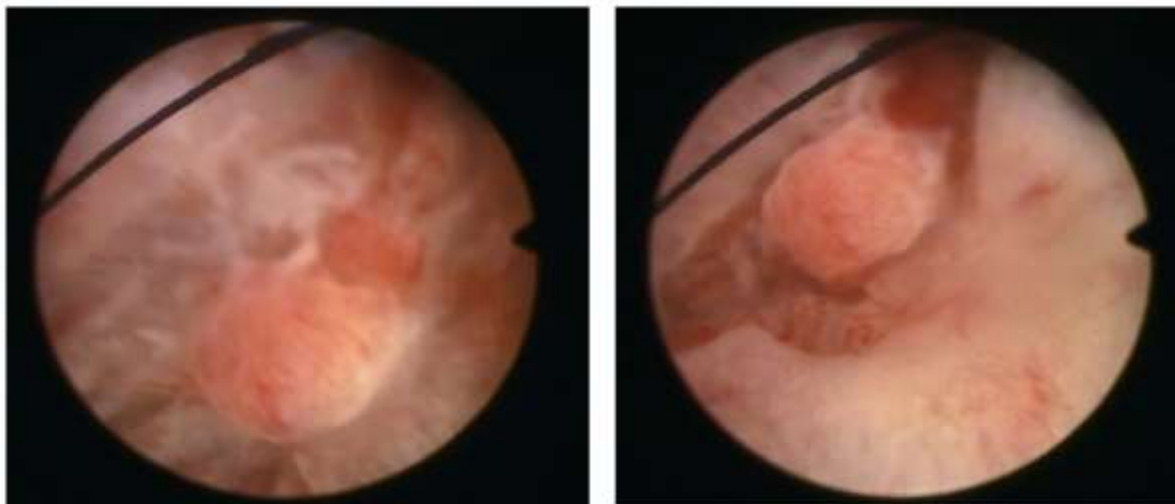


Figure 1: Diagnostic hysteroscopy pictures showing a very suspicious endocavitary process with anarchic vessels on the surface.

The anatomopathological study of the surgical sample showed an endometrial mucosa dissociated by a dense inflammatory infiltrate, rich in plasma cells, with the presence of lymphocytes and some neutrophils. This infiltrate reaches the endocervical stroma. It is associated with non-atypical endometrial hyperplasia lesions. The ectocervix was unremarkable. The histological examination of the two uterine masses shows a tumor proliferation arranged in intersecting bundles, made of spindle-shaped cells, with a regular elongated nucleus, devoid of mitoses and a poorly limited eosinophilic cytoplasm. The histological appearance is therefore compatible with chronic endometritis, but requires further immunohistochemistry to rule out an underlying lymphomatous lesion. An immunohistochemical study was performed confirming chronic endometritis.

DISCUSSION:

Chronic endometritis is a rare pathology, found in about 8% of endometrial biopsies and curettages [3]. Its definition is purely anatomopathological: it associates the presence of plasma cells in the endometrial stroma, epithelial changes such as squamous or eosinophilic metaplasia, lymphocytic exocytosis through the epithelial lining, the presence of lymphoid follicles, a spindle-shaped appearance of the cells of the endometrial stroma suggestive of fibroblasts, and accumulation of inflammatory cells in the glandular lumen [2].

It usually causes few diagnostic problems [10]. However, intense endometritis may be responsible for a polypoid appearance of the mucosa, suggesting an endocavitary tumor lesion on imaging. Indeed, pseudotumor endometritis, particularly lymphomatous endometritis, may contain numerous large atypical lymphoid cells organized in nodular and follicular structures [4].

Thus, the diagnosis of lymphoma, although rare, should be raised in the presence of an inflammatory infiltrate of significant intensity, associated with extension to the superficial myometrium and significant destruction of the endometrial glands. Primary malignant lymphomas of the uterus are a rare pathology and more frequently involve the cervix than the uterine body [5]. They are almost always B-cell lymphomas, the most frequent being the diffuse large cell type (67%), followed by the follicular type (28%), and exceptionally the MALT type [6-9].

Initially, the diagnosis may be guided by the identification of a causative disease that may be at the origin of the endometritis. Indeed, endometritis may be favored by a pelvic inflammatory disease, such as salpingitis, ovaritis or vaginitis [1]. It can be observed in the postpartum and postabortion period or in the context of an inflammatory response to an instrumental aggression (biopsy, curettage or intrauterine device) [2]. Chronic endometritis can also be secondary to organic lesions, such as cervical stenosis, polyps, myomas, or even carcinomas [2]. It is also found in endometrial samples taken for uterine hemorrhage [2]. Moreover, the majority of uterine lymphomas are revealed by metrorrhagia [7].

Pseudo-lymphomatous forms of chronic endometritis have also been described in more general infectious diseases such as infectious mononucleosis [4].

In view of this perplexity of diagnostic leads, confirmation can only be anatomopathological, the diagnosis of low grade lymphoma of the MALT type being more difficult to rule out. [1] The following are in favour of a lymphomatous lesion: macroscopic presence of an endometrial tumour mass, deep infiltration of the myometrium and cervical stroma, absence of ulceration of the surface epithelium and lymphocytic extension to the surface lining, abundance of B lymphocytic cells compared to T lymphocytes and monomorphic character of the proliferation.

In some cases, as in our patient, only the immunohistochemical study can distinguish between chronic endometritis and malignant lymphoma.

CONCLUSION:

In conclusion, chronic endometritis, in its intense form, may take on a pseudolymphomatous histological appearance, thus passing clinically and radiologically for a tumoral pathology.

The diagnosis of certainty is based on an anatomopathological study completed by immunohistochemistry or even a study of the clonality of the lymphoid population, hence the need for the clinician and the anatomopathologist to be aware of and to master this entity.

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