Case Report

Pseudocarcinomatous Hyperplasia of the Fallopian Tube Mimicking a Tubal Neoplasm: A Rare Entity

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Abstract

Pseudocarcinomatous hyperplasia of the fallopian tube is a rare, reactive response to an underlying inflammatory or neoplastic process. Only a few cases have been reported in literature. It is a benign condition that mimics a malignant neoplasm clinically and radiologically. Thus, a preoperative diagnosis of this entity is important to avoid radical surgical treatment. We report a case of pseudocarcinomatous hyperplasia of the fallopian tube in a 27-year-old female, which was clinically and radiologically thought to be a tubal neoplasm. The approach to such a case and the differentiating features from adenocarcinoma have also been discussed.

Keywords: *Fallopian tube, neoplasm, pseudocarcinomatous hyperplasia*

Introduction

Pseudocarcinomatous hyperplasia is a rare nonneoplastic pathology of the fallopian tubes. It occurs as a reactive response to an underlying inflammatory or neoplastic process, such as exogenous estrogen administration, endogenous estrogen production by ovarian lesions, and tuberculous or nontuberculous salpingitis.[1] It is a benign condition that may be confused with malignant neoplasms, i.e., it can mimic adenocarcinoma clinically and radiologically. Since this condition has not been discussed extensively in the literature, its differentiation from tubal carcinoma can be difficult, even on histopathology.

Herein, we present a case of pseudocarcinomatous hyperplasia of the fallopian tubes with chronic salpingitis in the fallopian tubes mimicking a tubal carcinoma. This case report describes the rare case and discusses the differential features helping in the discrimination of benign pseudocarcinomatous hyperplasia of the fallopian tube and tubal carcinoma. These features should be taken into consideration to ensure accurate diagnosis and proper management.

Case Report

A 27-year-old female presented with the chief complaints of sudden-onset pain abdomen, anxiety, and bleeding per vaginal (PV). On detailed history, the patient revealed that she had low-grade pain in the lower abdomen for the past 2 months. PV examination revealed right-sided adnexal mass. Ultrasonography showed a well-defined, right-sided, adnexal mass with thickened wall and papillary projections, based on which possibility of a tubal neoplastic lesion was suggested. Serum sample was sent for CA125 levels, which were normal (29 U/ml). An emergency laparotomy was performed due to excessive pain and blood loss. Peroperatively, right fallopian tube was dilated and congested, with thickened wall. Furthermore, there was the presence of pelvic adhesions. However, no growth or mass was appreciated. A right-sided salpingectomy was done. Grossly, the fallopian tube segment was dilated measuring 3.5 cm in length and 1.5 cm in diameter, with congested external surface. On cut, wall was thickened and lumen was identified. Based on the clinical, radiological, and gross features, it was thought to be a neoplastic lesion. Microscopic sections showed mucosal epithelial hyperplasia, with papillary growth and fusion of plicae [Figure 1a]. Focally cribriform pattern was seen. Epithelium showed nuclear crowding and epithelial stratification [Figure 1b].

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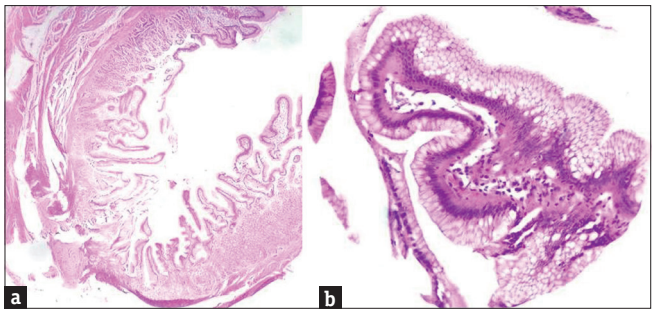

Figure 1: (a) Microscopic section showing mucosal epithelial hyperplasia, with papillary growth and fusion of plicae (H and E, ×4). (b) Microscopic section showing nuclear crowding and epithelial stratification (H and E, ×40)

However, there was minimal cytological atypia and mitotic activity was very low. There was no evidence of invasion of the tubal wall. Mild inflammation and congestion of the fallopian tube wall were also noted. Thus, a diagnosis of psedocarcinomatous epithelial hyperplasia of the fallopian tube associated with salpingitis was rendered.

Discussion

Pseudocarcinomatous hyperplasia is the term for lesions exhibiting florid epithelial hyperplasia with atypical features. However, pseudocarcinomatous hyperplasia of the fallopian tube is very rare. Till date, approximately 17 cases of pseudocarcinomatous hyperplasia of the fallopian tube have been reported in literature.[2] The age of the patients in the reported cases ranged from 17 to 40 years. Nearly half of these cases were associated with chronic salpingitis, as in the present case, while others were associated with pyosalpinx, tubo-ovarian abscess, hydrosalpinx, or tuberculosis.

Radiological features of pseudocarcinomatous hyperplasia of the fallopian tube may mimic chronic salpingitis, tuberculosis, or tubal carcinoma. Serum CA125 levels are significantly higher in patients with tubal neoplasms than in patients with benign lesions and may help in the preoperative differentiation of benign and malignant tubal lesions.[3] However, preoperative CA125 levels have low specificity.[4]

On histopathology, features of pseudocarcinomatous hyperplasia overlap with those of a neoplasm, i.e., both may show florid epithelial hyperplasia, papillary growth, fusion of plicae, epithelial stratification, nuclear crowding, and atypical features.

Pseudocarcinomatous hyperplasia is histologically differentiated from adenocarcinoma by several morphologic features, such as absence of a grossly detectable tumor, presence of marked chronic inflammation, lack of solid epithelial proliferation, mild nuclear atypia, paucity of mitotic figures, and no evidence of invasion of the tubal wall, as in our case.

Pseudocarcinomatous hyperplasia of the fallopian tube is a rare disease whose clinical and radiologic features overlap with other lesions, e.g., tubal carcinoma and salpingitis. Thus, biopsy, preferably intraoperative frozen section, is essential for confirmation of diagnosis and prevention of radical surgery for this benign lesion.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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