

Mixed transitional cell carcinoma with foci of squamous cell carcinoma of endometrium: A case report

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Abstract

Transitional cell carcinoma of the uterus is rare. To have a squamous cell carcinoma component within the transitional cell carcinoma of uterus has not been reported in the literature so far. We present a case of mixed transitional cell carcinoma with foci of squamous cell carcinoma in a 79 year female and a review of literature.

Keywords

transitional cell carcinoma; squamous cell carcinoma; mixed transitional cell carcinoma; uterus

Introduction

Transitional cell carcinoma of the endometrium is very rare. Transitional cell carcinoma has architectural and cytologic features similar to those of urothelial carcinoma, but it retains müllerian profile [1]. Till date, only 22 cases of transitional cell carcinoma have been reported. It is almost always admixed with one or another of more conventional pattern [1]. None of the cases reported have mixed squamous cell component. Here we present to you a case of mixed transitional cell carcinoma with foci of squamous cell carcinoma.

Case Report

79 year old female presented with a history of abdominal fullness and dirty discharge per vagina for 1 year. There was no history of post menopausal bleeding or weight loss. Her last menstrual period was 25 years back and last child birth was 36 years back. On examination, the abdomen was soft and non tender. Per speculum examination revealed normal vulva and healthy cervix. Per vaginal examination showed huge cystic mass palpable about 32 week size. Ultrasonographic examination showed large fluid collection (approximately 550ml) within the uterus and echogenicity with minimal vascularity. Papillary like projection were present within the collection. Diagnosis of hematometra with internal papillary growth was made. CT scan showed a cystic lesion in the uterus with a normal urinary bladder.

Total abdominal hysterectomy with bilateral salphingo-opherectomy was performed. 1500ml of fluid was evacuated which was foul smelling. The fluid was sent for culture and sensitivity. It did not reveal any growth. The uterus was enlarged and fragile. Round infundibulopelvic ligament was also fragile. The uterus was fixed in 10% formalin for 24 hours. The cavity of the uterus showed mass that was friable and easily detachable along with many irregular nodules within the cavity. The lower uterine.

segment and the cervix also showed similar growth. Both tubes and ovaries were unremarkable. The microscopic examination showed tumor comprising of two histological patterns with a predominance of tumor composed of atypical transitional epithelium arranged in fused papillae with central fibrovascular core. Admixed in between these tumor cells were tiny foci of second pattern of tumor composed of atypical squamous cell component in the ratio of 90:10. Poorly formed keratin pearls were also noted. Features of vascular invasion were seen. The tumor cells were seen infiltrating the cervix. The fallopian tubes and the ovaries were free from tumor cell invasion. A diagnosis of a mixed carcinoma of uterine corpus (Transitional cell carcinoma admixed with foci of squamous cell carcinoma) was given.

Discussion

A mixed endometrial carcinoma is composed of two or more different histological types of endometrial carcinoma, at least one of which is of the type II category [2]. Transitional cell carcinoma is a rare, distinct subtype of endometrial carcinoma with morphological features of urothelial differentiation, but retention of immuno profile [3]. Squamous cell carcinoma arising in the endometrium in pure form is extremely rare. Some cases have developed in elderly patients with pyometra, presumably on the basis of a preexisting endometrial squamous metaplasia [1]. In our case too, the patient is an elderly female with pyometra and could be the likely cause of foci of squamous cell carcinoma. Squamoid differentiation however are seen in 10-25% of endometroid carcinoma [2].

Macroscopically, the tumors reported are introcavitary and friable which is similar to our case. Microscopically, the tumors are composed of tightly packed, papillary structures with their fibrovascular cores, resembling transitional cell carcinoma of the urinary tract [4]. Of the reported cases, exclusive transitional cell carcinoma was seen in only 4 cases of which one was seen arising in a polypoid adenoma [5]. Many cases are reported those arising in the cervix while only few are seen in the fallopian tube [6]. Transitional cell carcinoma of uterus associated with Brenner tumor of ovary has also been reported [7].

The overall prognosis appears to be worse than what might be anticipated for the stage of presentation, Transitional cell carcinoma appears to be the more aggressive histological sub type [3].

Conclusion

Transitional cell carcinoma is an unusual variant of endometrial carcinoma having distinctive histologic and immunophenotypic features. Identification of squamous cell carcinoma within the transitional cell carcinoma of endometrium helps to broaden the morphological spectrum of epithelial neoplasm of the endometrium. Despite being a rare neoplasm, its recognition is important to delineate its clinical and pathological features and to establish prognostic differences from those of other histologic types of endometrial carcinoma.

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