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A Case Report of Colonic Adenocarcinoma Metastatic to the Endometrium

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Abstract

Metastases to endometrium from the colonic carcinoma or others extragenital carcinoma are an exceptional event. We report a case of Colonic adenocarcinoma Metastatic to the Endometrium, a 68-year-old North African woman known for her history of colonic adenocarcinoma, underwent for a surgical hysteroscopy that was indicated Infront of an endo-uterine bleeding and an endometrial thickening, The histological and immunohistochemical appearance suggested to be compatible with a secondary location of the colon adenocarcinoma known (positive anti-CDX2, negative for CK7, positive for CK20). Metastasis to the endometrium from extragenital carcinoma are very exceptional, and the prognosis is extremely poor. However, some patients attain long-term survival by surgical intervention even in such cases.

***Keywords**: endometrium metastatic; colonic adenocarcinoma; metrorrhagia; Morocco.*

Introduction

The sites of metastasis from colorectal cancer are usually Liver, lung or lymph nodes and peritoneum, but the uterine localisation remains rare, we report a case report about an endometrium Metastasis from Colon Cancer.

Observation Medical

a 68-year-old North African woman, Gravida 7, para 10, all delivered all delivered vaginally. was referred to our department for post-menopausal bleeding, her medical history revealed that she had undergone laparotomic surgery for a Sigmoid Colon Adenocarcinoma with liver metastasis, defunctioning colostomy as part of a bowel obstruction followed by a sigmoid colectomy and Partial hepatectomy that was performed curatively.

The histopathological analysis showed stage IIIB adenocarcinoma well differentiated, the tumor was stage B according to the Dukes classification.

The patient received peri- and post-operative chemotherapy with a total of 6 cures of XELOX without significant adverse drug effects.

Following the end of adjuvant chemotherapy, the patient was under surveillance. Four months later, she presented a liver metastatic relapse, found to be unresectable, for which she was placed under palliative chemotherapy 1st line by 8 cures of XELOX, shown to be radiologically stable and CEA at 200 ng/mL, maintenance by CAPECITABINE oral.

Sex Mount later, she was referred to our department for important post-menopausal bleeding, after treatment with tranexamic acid.

Clinically she was overweight and presented an endo-uterine bleeding, without others signs.

The blood work revealed markedly elevated CA 19-9 **(**867UI/mL**)** and CEA **(**>1000 ng/mL**)**, CA 125 was mildly elevated **(**49 UI/mL**)**; other markers were normal.

A Pelvic ultrasonography were performed to identify the source of bleeding revealed a normoflexed, median uterus, an heterogenous hypoechoic endometrial thickening at 10mm diffused, and highly vascularized. The cervical canal and the ovaries were apparently normal. No ascites was evident.

A surgical hysteroscopy was performed, firstly shown a hypertrophied endometrium, followed by an hysteroscopic endometrial ablation.

The histological and immunohistochemical appearance suggested to be compatible with a secondary location of the colon adenocarcinoma known **(**the tumoral cells was well marked with the antibody anti-CDX2, negative for CK7, positive for CK20**)**. we diagnosed the uterine tumor as metastatic tumor from the coloncarcinoma.

She was undergoing chemotherapy by 6 cures of XELIRI, that displayed disappearance of metrorrhagia, without significant adverse drug effects.

Discussion

Rare cases of Metastasis to the female genital tract from extragenital malignancies have been reported in medical scientific literature, and only 4,6% of all metastases occurring in the female reproductive tract affect the endometrium **(**1, 2**)**.

Mammary origin dominated the uterine metastases by 42,9% that were reported in the literature [3,4,5]. Other primary tumors include carcinomas of the stomach **(**29%**)**, lung, kidney, colon, pancreas,

cutaneous malignant melanomas, soft tissue sarcomas, and medullary thyroid carcinomas **(**1,5**)** As for the colon cancer, the sites of metastasis are usually liver, lymph nodes, or lung and peritoneum, but the uterine remains an extremely rare localization.

Colon adenocarcinoma metastatic to endometrium is usually sited as an extremely rare event particularly in cases where a widely disseminated disease is not apparent **(**6**)**.

The clinical aspect of the endometrial involvement, are often presented as abnormal uterine bleeding that appears to be the first presenting sign of metastasis, others symptoms may be present as Lower abdominal pain, vaginal bleeding, vaginal discharge and anemia **(**5**)**. In fact, this may occur simultaneously, prior to, or following the diagnosis of the primary tumor.

The ultrasonography potentially brings information about the endometrium, however in front of an abnormal uterine bleeding in a context of an extrauterine malignancies, the origin and the histological examination should be performed to ensure appropriate diagnosis and treatment, preferentially by a surgical hysteroscopy. As complication of the endometrial curettage, may lead to uncontrollable haemorrhage particularly if the metastatic tumor involves the myometer, that's why the resection on endometrium should be performed with extreme caution.

In the histological sense colon adenocarcinoma and endometrial adenocarcinoma distinction lead to some misdiagnosis owing to a kind of morphological characteristic similarities and it is particularly challenging.

The former is frequently associated with poor cytoarchitectural correlation, high-grade, and intraluminal dirty necrosis. Our cases demonstrated an invasive well differentiated adenocarcinoma with nuclear atypia, hyperchromatic and highly eosinophilic cytoplasm.

immunohistochemistry represents a valid diagnostic aid. Combined immunostaining for CK7, CK20, and CDX2 is particularly advantageous for the differential diagnosis [7]. The lack of CK7 expression, uniform immunoreactivity for CK20 and the nuclear positivity of cancerous cells for CDX2 strongly suggested of metastatic a colonic origin of the adenocarcinoma.

As expected from the blood values, CEA stain was strongly and diffusely positive on the cancer.

Conclusion

By way of conclusion for patients how present an anormal uterine bleeding especially with a charged history with previous carcinoma in particularly breast, stomach and colon should not be underestimated.

Although rare, an endometrial metastasis can occur and can be the first sign of relapse of the disease. Pathological examination and knowledge of the clinical history may help differentiate between primary and metastatic carcinomas.

In these cases, an immunohistochemical panel assembled of CK7, CK20, CDX2, is useful for the final diagnosis.

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