Tumor of the testis of extragonadal origin accidentally found in clinical examination.

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ABSTRACT

Introduction: Metastatic cancers of the testis are rare accounting for less than 4% of all testicular tumors. Among most rare are those of colon cancer.

Case report: A 58 year old man presented with suprapubic pain in the ED. In clinical examination a painless right testicular mass was noted. He reported an ileo-hemicolectomy for a stage IIIB sigmoid colon adenocarcinoma 3 years priorly to his current visit. Pathology examination of the orchidectomy specimen diagnosed metastatic colon adenocarcinoma. Although patient refused further treatment he is disease free 12 months after surgery.

Conclusion: Although rare, metastasis to testes should be considered as a differential diagnosis especially in older men with history suggesting the presence of a non-testicular malignancy.

Key words:
colon cancer, testicular metastasis, immunohistochemistry.
ΠΕΡΙΛΗΨΗ

Εισαγωγή: Οι μεταστατικοί καρκίνοι των όρχεων είναι σπάνιοι και υπολογίζονται στο 4% όλων των όγκων των όρχεων. Μεταξύ των πιο σπάνιων είναι εκείνοι του καρκίνου του παχέους εντέρου.

Αναφορά περιστατικού: Ένας 58χρονος άνδρας προσήλθε με υπερηβικό αλγός στο ΤΕΠ. Στην κλινική εξέταση παρατηρήθηκε μια ανώδυνη μάζα στον όρχη. Ο ασθενής ανέφερε σιγμοειδές αδενοκαρκίνωμα του παχέους εντέρου στάδιο ΙΙΒ για το οποίο υποβλήθηκε σε ημικολεκτομή προ 3ετίας. Η ιστολογική εξέταση του δείγματος της ορχεκτομής διέγνωσε μεταστατικό αδενοκαρκίνωμα του παχέους εντέρου. Αν και ο ασθενής αρνήθηκε περαιτέρω θεραπεία είναι ελεύθερος νόσου 12 μήνες μετά την επέμβαση.

Συμπέρασμα: Αν και σπάνια, η μετάσταση σε όρχεις θα πρέπει να θεωρείται ως μια διαφορική διάγνωση ειδικά σε ηλικιωμένους άνδρες με ιστορικό που υποδηλώνει την παρουσία μίας εξω ορχικής κακοήθειας.

Λέξεις ευρετηριασμού
Καρκίνος παχέους εντέρου, μεταστατικοί καρκίνοι όρχεων, ανοσοιστοχημεία

Introduction

Metastatic testicular cancers are rare accounting for 2,4%-3,6%\(^1\). Tumors of various origin have been reported to metastasize to the testes such as sarcomas, melanomas and adenocarcinomas of the prostate, lung, colon and kidney\(^1\)-\(^4\). The prevalence of testicular metastasis from colon cancer is approximately 8 per cent of all testicular metastatic lesions. Less than 50 cases of colon metastasis to the testicle have been reported either at autopsies or as isolated case reports of advanced metastatic disease\(^2\)-\(^5\)-\(^10\).

Case Report

A 58 year old man presented with suprapubic pain in the ED. In clinical examination a painless right testicular mass was noted. Serum chorionic gonadotrophin fetoprotein and human placental lactogen values were within the reference ranges Ultrasonography of the scrotum revealed a solitary testicular mass measuring 1,97x1cm (figure 1). CT scan of the chest, abdomen and pelvis were negative for lymphatic and distant metastases. The patient reported an ileo-hemicolectomy for a stage IIIB (T3N1M0), moderately differentiated adenocarcinoma of the sigmoid colon 3 years priority to his current visit. He received adjuvant chemotherapy and postoperative radiotherapy and he was on regular follow-up with no evidence of disease.
A right radical orchidectomy was performed. On microscopic examination the tumor exhibited an interstitial growth pattern with preservation of tubules. Vascular invasion was also noted (figures 2-4). The immunohistochemical study showed that the tumor cells were positive for CKAE1,CKAE3,CK20 and CDX2 and negative for Vimentin,PLAP,CD30,AFP and HGC (figure 5).

The morphology of the tumor and the immunohistochemistry were consistent with metastatic colon adenocarcinoma. Although patient refused further treatment he is disease free 12 months after surgery.

Discussion

The exact mechanism of metastasis from the colon to the testes remain unknown however in the present case a retrograde lymphatic spread is not to be excluded. Other routes of metastatic spread include arterial embolisation and retrograde spread through spermatic
veins from the renal veins or the retroperitoneum due to the absence of valves\textsuperscript{2,8,10}. Several authors suggested that isolated testicular relapses may have a better prognosis than systemic relapse in other organs such as liver, lung and distant lymph nodes\textsuperscript{2}. In confirmation to the above, the patient presented in this report is disease free 12 months after surgery despite post-operative discontinuation of the treatment. Whether isolated testicular relapses have a better prognosis than systemic relapses in other organs needs to be confirmed by pooled analysis of the outcomes of patients described in similar case reports. From the pathologic point of view metastatic carcinomas to the testis are usually solitary and may simulate primary neoplasms, including rete adenocarcinoma and sertoli cell tumor\textsuperscript{10}. However, the presence of extensive vascular and lymphatic invasion and the interstitial pattern in which the seminiferous tubules are spared are suggestive of a metastasis\textsuperscript{2,4}. The patient’s medical history and the immunohistochemical findings facilitate the origin of the tumor.

**Conclusion**

Testicular metastatic disease is uncommon particularly from colon cancer. Although rare, metastasis to testes should be considered as a differential diagnosis especially in older men with history suggesting the presence of a non-testicular malignancy.

**References**


