A case of descending colon carcinoma metastasized to left spermatic cord, testis, and epididymis

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KEY WORDS

colon cancer ◗ high orchiectomy ◗ hemicolectomy ◗ metastatic cancer

ABSTRACT

We report a case of descending colon carcinoma metastasized to the left spermatic cord, testis, and epididymis. A 77-year old male patient underwent a left hemicolectomy for a descending colon cancer. He was referred to our department because of swelling and pain of the left scrotum two years and six months after surgery. High left orchiectomy was performed.
Histological examination revealed a metastasis of the colon carcinoma within the spermatic cord and epididymis approaching the testicle.
Reports on metastatic cancer of the testis are scarce, because this metastatic cancer is extremely rare.
In general, testicular pain is rare in the elderly. We suggest that any elder presenting with testicular pain deserves a complete clinical and diagnostic evaluation.

CASE REPORT

A 77-year-old male was referred to our department because of left inguinal and testicular pain as well as a hydrocele testis two years and six months after an operation for colon carcinoma. Patient's history revealed left hemicolectomy due to descending colon adenocarcinoma. Before referral to our department last abdominal CT scan showed no metastasis. Because of severe pain, we performed high orchiectomy on the left side. Histological examination of the orchiectomy specimen showed metastatic adenocarcinoma within the spermatic cord, which also infiltrated the epididymis and approached the capsule of the left testis.

DISCUSSION

Reports on metastatic carcinoma of the testis are extremely rare in the literature [1-4]. Metastatic tumors usually present as solitary, unilateral nodule and may mimick primary neoplasms of the testis [1].

Metastatic tumors involving the testis or its tunics are rare, with an incidence of only 0.02 to 0.06% in large autopsy studies [5]. Yet there are certain aspects of testicular metastasis that are of clinical and pathologic importance and it is imperative that a testicular metastasis be distinguished from a primary testicular tumor.

Moreover, metastatic carcinoma of the testis is generally found incidentally at autopsy or at orchiectomy for prostate cancer. Metastasis from others primary sites is also a rarity [4].

Almagro reported numerous pathways through which tumors may metastasize to the testis; the occurrence of testicular metastasis is rare [5, 6]. The reason for this still remains unknown.

According to Gubitosi et al. [7]. Metastatic spread from colonic carcinoma is quite predictable, initially through lymphatic vessels, followed by the hematogenous route.

The most common metastatic sites of colorectal cancer are regional lymph nodes (50-70%) and the liver (35-50%); common sites are lung (21%), peritoneum (15%), and ovaries (13.1%).

Metastases from colon cancer [6] rarely involve the central nervous system (8.3%), bone (8.7%), kidney (6.6%), testis, penis, uterus, and oral cavity. However, very rare metastases to the adrenal gland (4.3%), hilar lymph node, skin, and muscles have been reported, as well as the occasional case-reports of metastasis to other organs, such as the pancreas, maxillary sinus, thyroid and synovium of the knee, have been described.

Gubitosi et al. hypothesized that there is a high probability of a neoplastic cell migration through the lymphatic vessels of the abdominal wall. He underlined the probable role of lymphatic surgery on the genesis of unusual metastasis [7].

Various pathways have been proposed as routes of tumor spread leading to the development of testicular metastasis. These include direct invasion, retrograde venous embolism, arterial embolization, retrograde lymphatic extension from paraaortic lymph nodes, and transperitoneal seeding.

We speculate that the occurrence of testicular metastasis depends on many factors; namely, the likelihood of tumor cells being carried to the testis and the ability of these cells to establish themselves as metastatic growths, as well as the relatively lower temperature of the intrascrotal contents.

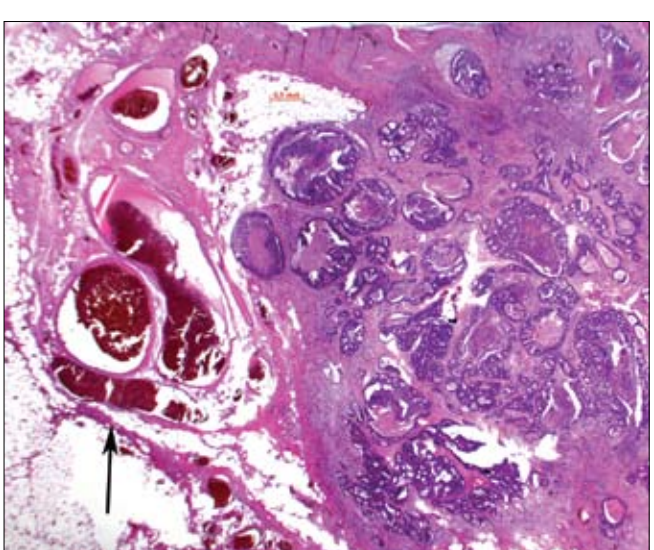

Fig. 1. Histological examination of the orchiectomy specimen showed metastatic adenocarcinoma within the spermatic cord (arrow) which also infiltrated the epididymis and approached the capsule of the left testis.

Testicular pain is rare in the elderly. We therefore suggest a complete clinical and diagnostic evaluation in elderly males presenting with testicular pain.

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