CASE REPORT

Metastasis of the epididymis and spermatic cord from pancreatic adenocarcinoma: A rare entity. Description of a case and revision of literature

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Summary

Introduction: Metastatic epididymal and spermatic cord adenocarcinoma from epithelial tumors are a rare condition. The most frequent primary cancers are prostate, lung, kidney, gastrointestinal tumors and breast. In literature, there are very few cases reporting metastasis from pancreatic cancer to epididymis and spermatic cord.

Case description: We report a case of 70-years old man with history of left orchiectomy for undescended testicle, who presented to our department with a palpable nodule in the right scrotum. Scrotal ultrasound revealed an inhomogeneous hypoechoic nodule of epididymis and/or spermatic cord. Neoplastic markers showed high levels of CEA (carcinoembryonic antigen) and bHCG (beta Human Chorionic Gonadotropin). The patient underwent right surgical scrotal exploration with orchiectomy. Pathologic examination revealed pathologic tissue showing rare glandular structures. Immunohistochemistry profile was compatible with malignant epithelial neoplasm with glandular differentiation. Total body CT-scan revealed pathologic tissue in pancreas between head and body and a suspect pathologic lesion in liver and 18-FDG PET-scan confirmed the neoplastic neoplastic mass and a suspect secondary hepatic lesion. Biopsy of pancreatic pathologic area was positive for ductal pancreatic adenocarcinoma. The patient was sent to oncologic evaluation and started chemotherapy.

Conclusions: Malignancies of epididymis and spermatic cord are rare entities and, in literature, very low number of cases of metastasis from pancreatic carcinoma to epididymis and spermatic cord are described. Early differential diagnosis is fundamental mostly in those patients with age range unusual for testis cancers.

KEY WORDS: Spermatic cord cancer; Metastasis; Pancreatic cancer; Adenocarcinoma; Epididymis cancer; Scrotal tumour.

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INTRODUCTION

Metastatic epididymal and spermatic cord adenocarcinoma from epithelial tumors are a rare condition. The most frequent primary cancers with metastasis to epididymis and spermatic cord are prostate, lung, kidney, gastrointestinal tumors and breast cancers (1-2). In literature, there are few reports regarding epididymis and spermatic cord metastasis in gastric cancers (3-5), colorectal cancers (6-8), prostate cancer (9) and pancreatic adenocarcinoma (2). In particular, very few number of cases reported metastasis from pancreatic cancer to epididymis and spermatic cord. We report a case of 70-years old man with history of left orchiectomy for undescended testicle in young age, who presented to our department with a palpable nodule in right scrotum. The patient underwent right radical orchiectomy finding adenocarcinoma of epididymis and spermatic cord probably secondary to gastrointestinal cancer; a total body CT-scan showed a suspect pancreatic lesion that a biopsy confirmed to be a ductal pancreatic adenocarcinoma.

CASE REPORT

A 70-years old man presented with right scrotal palpable nodule without pain or other symptoms, with history of left orchiectomy in young age for undescended testis. Scrotal ultrasound revealed an inhomogeneous hypoechoic nodule of epididymis and/or spermatic cord with small calcifications. Neoplastic markers showed carcinoembryonic antigen (CEA) and beta Human chorionic gonadotropin (bHCG) respectively 9.7 ng/ml (reference ≤ 5.5 ng/ml) and 6.7 mU/ml (reference ≤ 2.5 mU/ml). The patient underwent right surgical scrotal exploration with orchiectomy.

Pathologic examination revealed a neoplastic mass of around 2 centimetres at epididymis and spermatic cord. Microscopically, pathologic tissue showed rare glandular structures, with slt-like and papillary pattern and presence of mitosis with associated desmoplasic reaction. Immunohistochemistry profile was positive for cytokeratin AE1 AE3, polyclonal CEA, cytokeratin 7, BerEp4 (Ep-CAM/ Epithelial Specific Antigen) and negative for alpha-fetoprotein, OCT3/4 (octamer-binding transcription factor), D240, Placental Alkaline Phosphatase (PLAP), CD30. This histopathologic pattern was compatible with malignant epithelial neoplasm with glandular differentiation. Based on rarity of primary epididymis and spermatic cord
tumors, the Pathologist suggested a differential diagnosis with other epithelial cancers. We performed a total body CT-scan that revealed pathologic tissue in pancreas between head and body and a suspect pathologic lesion in the left hepatic lobe of 26 millimetres and another suspect metastatic hepatic lesion in IV segment of 12 millimetres (Figure 1). 18-FDG PET-scan confirmed the pancreatic neoplastic mass and a suspect secondary hepatic lesion (Figure 2). Patient performed endoscopic ultrasound and biopsy of pancreatic pathologic area that was positive for ductal pancreatic adenocarcinoma. The patient was sent to oncologic evaluation and started chemotherapy with Gemcitabine and Abraxane i.v according the scheme day 1, 8, 15 of a 28 days cycle.

CONCLUSION

Generally, malignancies of epididymis and spermatic cord are rare entities, with few cases of both primary cancers and secondary ones. In literature, very low number of cases of metastasis from pancreatic carcinoma to epididymis and spermatic cord are described and usually they are associated with a poor prognosis. Early differential diagnosis is fundamental mostly in those patients with age range unusual for testis cancers. In these cases, at the time of diagnosis, it would be correct to suspect and exclude an “extra-scratal” origin of the disease.

REFERENCES


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