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

Carmelo Agostino Di Franco 1, Bruno Rovereto 1, Daniele Porru 1, Valeria Zoccarato 1, Cesare Regina 1, Tiziano Cebrelli 1, Nicolo Fiorello 1, Alessandra Viglio 2, Lavinia Galvagno 3, Carlo Marchetti 1, Andrea Ringressi 1, Davide Barletta 1, Giovanni Giliberto 1
1 Department of Urology, University Hospital IRCCS Policlinico S.Matteo of Pavia, Italy; 2 Department of Pathology, University Hospital IRCCS Policlinico S. Matteo of Pavia, Italy; 3 Language and Translation Services, Enna, Italy.

Discussion
Pancreatic cancer, usually, is a poor prognosis tumor with five-year survival less than 5% in all stages and most patients are metastatic on diagnosis (10). Most common metastasis sites are liver, lung, kidney and bone; few cases described metastasis to skin, penis and spleen. Metastasis to epididymis and spermatic cord are quite rare: 8.1% of malignancies of epididymis and/or spermatic cord are metastases and, revision of literature, showed that the most frequent cancers metastasizing to spermatic cord and epididymis are stomach (42.8%) and prostate (28.5%) (1). In our case, the patient had history of left cryptorchidism treated with orchiectomy in young age; as described in literature, this condition could be associated with some rare cases of epithelial primary paratesticular cancers (11).

In literature, only few cases of metastasis from the pancreas to the epididymis have been previously reported (1, 12-14). Invasion of testes and paratesticular organs, in particular epididymis and spermatic cord, usually indicate a disseminated disease and a poor prognosis with a middle survival of 9.1 months from the diagnosis (1). As regard pancreatic metastatic cancers to testis and paratestis, prognosis is very poor with an estimated survival < 1 % at 5-years from diagnosis (14), and is known that the right testis is more commonly involved (15-16).

Several metastatic mechanism was proposed: these include direct invasion from the contiguous lesion, retrograde lymphatic extension from the para-aortic lymph nodes, retrograde venous or arterial embolism, transperitoneal seeding through a congenital hydrocele and retrograde extension from the vas deferens. In our case, we suppose the retrograde venous mechanism, through portal and caval venous system in fact we, also, had liver metastasis without lymph nodal involvement to exclude, at least at this early stage, the lymphatic way. In our patient, we checked neoplastic markers at the first step of diagnosis, including CEA; now we think it would have been appropriate to dose also CA 19.9 in presence of a neoplastic paratesticular mass to help in differential diagnosis.

References