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### Ewing's sarcoma of prostate

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**Introduction:** Ewing's sarcoma (ES) and primitive neuroectodermal tumor (PNET) are rare tumours with origin in bones and soft tissue. Rarely this tumour occur in genitourinary organs, particularly on prostate (there is only seven cases in literature). Usually this disease arises on young patients and has aggressive presentation. We report the eight case of a primary prostate ES.

**Case Report:** A twenty eight years old male presented at our hospital with a history of right testis and anal pain and tenesmus with evolution of four months. In the digital rectal examination was identified polilobulada mass anterior to the rectum, painful to touch. In imaging evaluation by abdominal and pelvic MRI presence of heterogeneous solid prostate lesion, 7 cm long axis, with invasion of adjacent muscles without cleavage plane, and lymph node involvement. Thoracic assessment without suspicious lesions. Lesion biopsy was taken (26/02/2014) with histology compatible with small cell neuroendocrine tumor of the prostate, cannot be excluded Ewing / PNET. The EWS gene rearrangement (3'EWS and 5'EWS) was positive. So, the patient started VIDE protocol (vincristine, ifosfamide, doxorubicin and etoposide – six cycles) followed by pelvic exenteration, whose histology revealed R0 surgery, with only two ES foci and the presence of microscopic focus of adenocarcinoma of the prostate (ypT2aN0). He completed adjuvante chemotherapy with 1 cycle of VAI protocol (vincristine, dactinomycin, ifosfamide) and 7 cycles of VAC protocol (vincristine, dactinomycin, cyclophosphamide), without complications. Currently is on surveillance with MRI pelvic and abdominal post therapy without evidence of disease.

**Conclusion:** Although primary ES/PNET of the prostate is an extremely rare soft-tissue sarcoma, it should be considered in the differential diagnosis of a prostate tumor. Several approaches, including cytogenetics methods, are important for an early, accurate diagnosis of ES/PNET. Because the disease is highly aggressive the treatment must be equally aggressive in order to achieve success.