

A Rare Form of Germ Cell Tumor: Testicular Extragenadal Choriocarcinoma

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Germ cell tumors (GCTs) account for about 95% of testicular tumors. The most aggressive and least common type is choriocarcinoma. It spreads hematogenously early on and many patients will present with extensive metastatic disease.

61-year-old male with a past medical history of HTN, HCV, and COPD presented with lower extremity weakness, urinary retention, and constipation for 2 days, which was concerning for cauda equina syndrome. The patient was initially thought to have lung cancer with metastasis to the chest wall and sacral spine from CT and was getting further workup in the outpatient setting. On physical exam, the patient was unable to move his right lower extremity with numbness and burning to his R hip and had minimal left lower extremity movement and sensation. He was also experiencing severe back pain and a large subcutaneous mass was seen on the left thoracic spine. On MRI, there was severe narrowing of the thoracic spine with a mass encroaching on the spinal cord, multiple pulmonary nodules in the lungs bilaterally, a mass in the chest wall, and multiple bony metastases in the thoracic, lumbar, and sacral spine. Subsequently, he underwent a thoracic laminectomy with removal of the thoracic mass due to cord compression. Pathology from the thoracic mass revealed diagnosis of choriocarcinoma. Of note, the patient had a normal testicular exam with an ultrasound showing no testicular masses. Notable labs showed elevated beta-HCG at 486,997 and LDH at 921. Etiology was likely from an extragonadal germ cell tumor arising from the lung. Oncological treatment with bleomycin, etoposide, and cisplatin (BEP) was discussed. However, the patient began having acute hypoxic respiratory failure with increasing oxygen demand requiring BIPAP. An alternative chemotherapy regimen of etoposide, ifosfamide, and cisplatin (VIP) was started due to bleomycin effects on the lung. At the start of VIP, his course was further complicated by sepsis from both a urinary and respiratory infectious source, which required pressors and a further increase of oxygen demand, eventually requiring intubation. Despite completing the first cycle (5 days) and receiving antibiotics, the patient continued to worsen and ultimately was shifted to comfort care.

This case illustrates a rare extragonadal testicular choriocarcinoma. Although this cancer has a poor prognosis due to its aggressive nature and limited understanding, it is important to initiate treatment to improve chances for morbidity/recovery and increase understanding of this rare cancer.