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Uncommon cause of sudden death in a young man – a postmortem case report

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Resumo

Introduction: Testicular cancer represents the most frequent malignant tumoral disease in men between the ages of 15 and 40 [1]. Of all primary testicular neoplasms, 95% are germ-cell tumours, either seminomatous or non-seminomatous [1,2,3]. Recent multidisciplinary therapeutic approach has resulted in current survival rates above 90% [2]. The most common symptom at the time of diagnosis is painless testicular swelling [2,3]. However, symptoms secondary to metastatic disease may be inaugural [2]. Patient embarrassment and a slow clinical investigation often result in diagnostic delays, with cancer detection in more advanced stages [2,3]. **Objectives:** Case report description. **Method:** 19-year-old male, smoker. He began with symptoms of cough, hemoptysis and back pain. He began follow-up Pulmonology consultations, presenting negative bacilloscopy, and multiple dispersed lung and liver nodules on chest CT (awaiting biopsy for histologic diagnosis). Days later he noted decreased visual acuity, dyspnea and loss of coordination while walking. Suddenly, he developed massive haemoptysis. Despite assistance by the EMTs, he died while being transported to the hospital. **Results:** a forensic autopsy was performed, which showed a hard nodular mass, occupying the entire

right testicular diameter, with extensive haemorrhagic and necrotic areas. Multiple hard and rounded nodules, with a haemorrhagic centre, were identified on both lungs (invading the bronchial and vascular structures), brain, liver, spleen, pancreas, left kidney and right adrenal gland. Blood was present on the airways. Histologic examination diagnosed a non-seminomatous embryonic testicular carcinoma with multifocal metastization, as well as extensive intra-bronchiolar and intra-alveolar haemorrhage. Toxicology blood screen showed absence of detectable concentrations of ethanol and drugs (abusive and medicinal). **Conclusion:** natural sudden death occurs within 24 hours of the onset of the terminal symptoms [4]. Sudden death in young individuals is, in most cases, due to primary cardiovascular diseases [5]. In this case, however, we present a sudden death caused by an extensively metastasized malignant testicular carcinoma, undiagnosed prior to death, whose pulmonary bronchial and vascular invasion caused abundant haemoptysis, culminating in asphyxia due to blood aspiration. Timely diagnosis and adequate clinical follow-up of testicular tumours is mandatory to avoid their detection in advanced stages, thus maintaining low morbidity and mortality rates.

Keypoints:

- Sudden death in young individuals may result not only from cardiovascular diseases, but also from oncological malignancies with fulminant evolution.
- Patient embarrassment and a slow clinical investigation regarding testicular cancer often result in diagnostic delays, leading to its detection in more advanced stages.
- Detection of testicular tumours at the earliest possible stage is of paramount importance to avoid high morbidity and mortality rates.

Keywords: testicular carcinoma; metastization; sudden death; hemoptysis

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