ANSWER TO PHOTO QUIZ (PAGE 392)

AN IMPRESSIVE CHEST X-RAY…

DIAGNOSIS

The first diagnosis that came to mind was malignancy with extensive lung metastases. Differential diagnostic considerations were infection/tuberculosis, toxic-reactive cause, and interstitial lung disease. Because of his age, we asked our patient whether he experienced abnormalities of his testicles (pain, abnormal growth) and asked permission to examine them. He then became reluctant to cooperate in further examination and refused hospital admission. Fortunately, he returned to the hospital the next day, confirming a swollen testicle. Plain CT scan showed an enlarged left testicle of 7.5 cm, retroperitoneal nodular masses in the renal area, and extensive nodular lung metastases (figure 2). Human chorionic gonadotrophin (HCG) measurement showed high levels of 2926 IU/l and alpha-fetoprotein of 14000 ng/ml. This is consistent with stage IIIc poor prognosis non-seminoma testis. He immediately was referred to a tertiary oncology centre and started with intensive chemotherapy consisting of bleomycin, etoposide, and cisplatin. In the first course, bleomycin was omitted considering the massive pulmonary lesions.

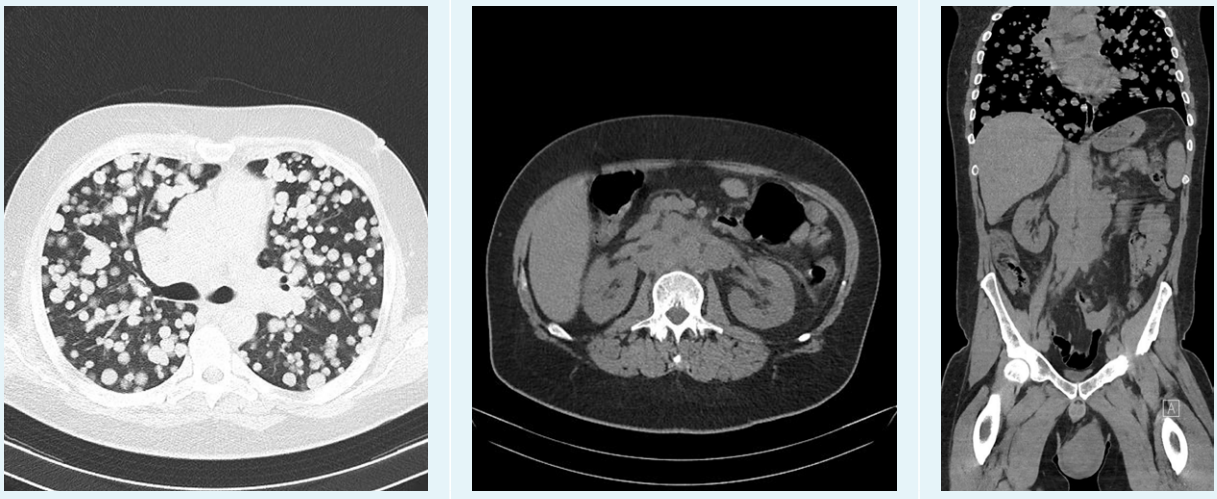
The incidence of testicular cancer is 4-6 per 100,000 men each year, with a slight annual increase. The two types of testicular cancer (seminoma and non-seminoma) are almost equally present. The highest incidence of non-seminoma is seen between 20 to 30 years of age, and of seminoma, between 30 and 40 years of age. Germ cell tumours of the testes are generally fast growing, aggressive tumours. They can spread via lymph vessels to the lymph nodes in the retroperitoneal area at the level of the renal artery and via the venous system to the lungs. Fortunately, these types of malignant tumours have a favourable prognosis. This is mainly the result of intensive chemotherapy regimens and improved surgical techniques.[1]

HCG is a glycoprotein that is primarily produced by trophoblasts of the placenta. Production of HCG is an important feature of germ cell tumours, although it also can be produced by numerous other types of tumours (bladder, lungs, uterus, and pancreas). Nevertheless, in cases with germ cell tumours, HCG can be used for the staging and monitoring of therapy.[2] In general, the first therapeutic step would be an orchiectomy. In this patient, the extensive pulmonary metastases urge for prompt treatment with chemotherapy, prior to an orchiectomy.[3]

DISCLOSURES

The authors have no conflicts of interest to declare.

Figure 2. *(Panel A) plain CT scan of chest (transverse view, lung window) at level of the main bronchus, showing extensive nodular metastases; (panel B) plain CT scan of abdomen (transverse view, at level of renal vessels), showing nodular masses obscuring the contour of the abdominal aorta and the inferior vena cava; (panel C): plain CT PA reconstruction showing an enlarged testicle of 7.5 cm and some hydrocele.*



A B C

PA = posteroanterior

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