



## Malignant priapism and germ cell tumour

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A 32-year-old man presented to the oncology department at The University of Hong Kong-Shenzhen Hospital (Shenzhen, China) in March, 2018, with persistent erection 4 weeks after left orchidectomy in another local hospital for testicular yolk sac tumour. On physical examination, the patient had a semi-rigid penile shaft and glans, with mild tenderness on palpation. There was no palpable nodule and no sign of necrosis of the glans. Penile doppler ultrasound demonstrated a flow rate of 10.1 cm/s. Serum alpha-fetoprotein (AFP) concentration was 226.1 ng/mL (normal range 0.0–9.0 ng/mL). CT scan at our hospital showed several lung metastases and PET scan showed additional pubic bone metastasis and hypermetabolic activity along the corpora cavernosa (figure). The patient was classified as poor risk according to the International Germ Cell Consensus Classification.

Priapism is defined as a penile erection that persists for 4 h or longer and is unrelated to sexual activity. Doppler ultrasound and analysis of blood gases might be able to distinguish low-flow (ischaemic) versus high-flow (non-ischaemic) priapism, but corporal biopsy remains the gold standard for diagnosis. Fluorodeoxyglucose (FDG) avidity and elevated AFP in a patient with known recurrent yolk sac tumour might forgo invasive, if not

unnecessary, biopsy. In this case, the patient declined to have a biopsy, and our multidisciplinary team decided that he should proceed to chemotherapy with monitoring of priapism.

Resolution of priapism and cure of the metastatic yolk sac tumour (normalisation of AFP concentration and complete response on PET scan) were achieved in this patient with effective chemotherapy (four cycles of bleomycin, etoposide, and cisplatin, as per the standard of care for poor-risk nonseminomas). The patient achieved a partial response after two cycles of chemotherapy and a complete response (ie, resolution of lung, pubic bone, and penile metastasis) after four cycles. At last follow-up in November, 2018, the patient was still in remission.

### Contributors

KOL was responsible for study design, literature search, data collection and interpretation, clinical care of the patient, and manuscript writing. JH was responsible for data collection, clinical care of the patient, and manuscript writing. Written informed consent to publication was obtained.

### Declaration of interests

We declare no competing interests.

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**Figure:** Malignant priapism in a patient with a metastatic germ cell tumour PET CT fusion image with fluorodeoxyglucose avidity at the corpora cavernosa.