

Two Distant Muscular Metastases from Papillary Carcinoma of the Thyroid Demonstrated by ^{18}F -FDG PET/CT and Confirmed by Biopsy

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^{18}F -FDG PET/CT has been widely validated in recent years for detection and follow-up of differentiated carcinoma of the thyroid and can have a complementary role in patients with high levels of serum thyroglobulin and a negative ^{131}I whole body scan [1, 2]. A 68-year-old woman, who had undergone thyroidectomy 7 years before for papillary carcinoma of the thyroid, came under our observation during follow-up. Serum thyroglobulin was 524 ng/ml (normal <3). A ^{131}I whole body scan showed only a pathological uptake in the left laterocervical region.

An ^{18}F -FDG PET/CT showed two muscular distant lesions, involving the right adductor longus and

right iliopsoas muscles. The lesions were confirmed as metastases from papillary carcinoma by biopsy (Fig. 1).

Although extrathyroidal extension to the soft tissues of the neck may occur, distant metastases are rare in patients affected by papillary carcinoma of the thyroid [3]. Skeletal muscle metastases from a differentiated thyroid carcinoma are extremely rare, and only a few cases are reported in the literature [4, 5]. To the best of our knowledge, this is also the first described case of a double distant muscle metastasis imaged with ^{18}F -FDG PET/CT.

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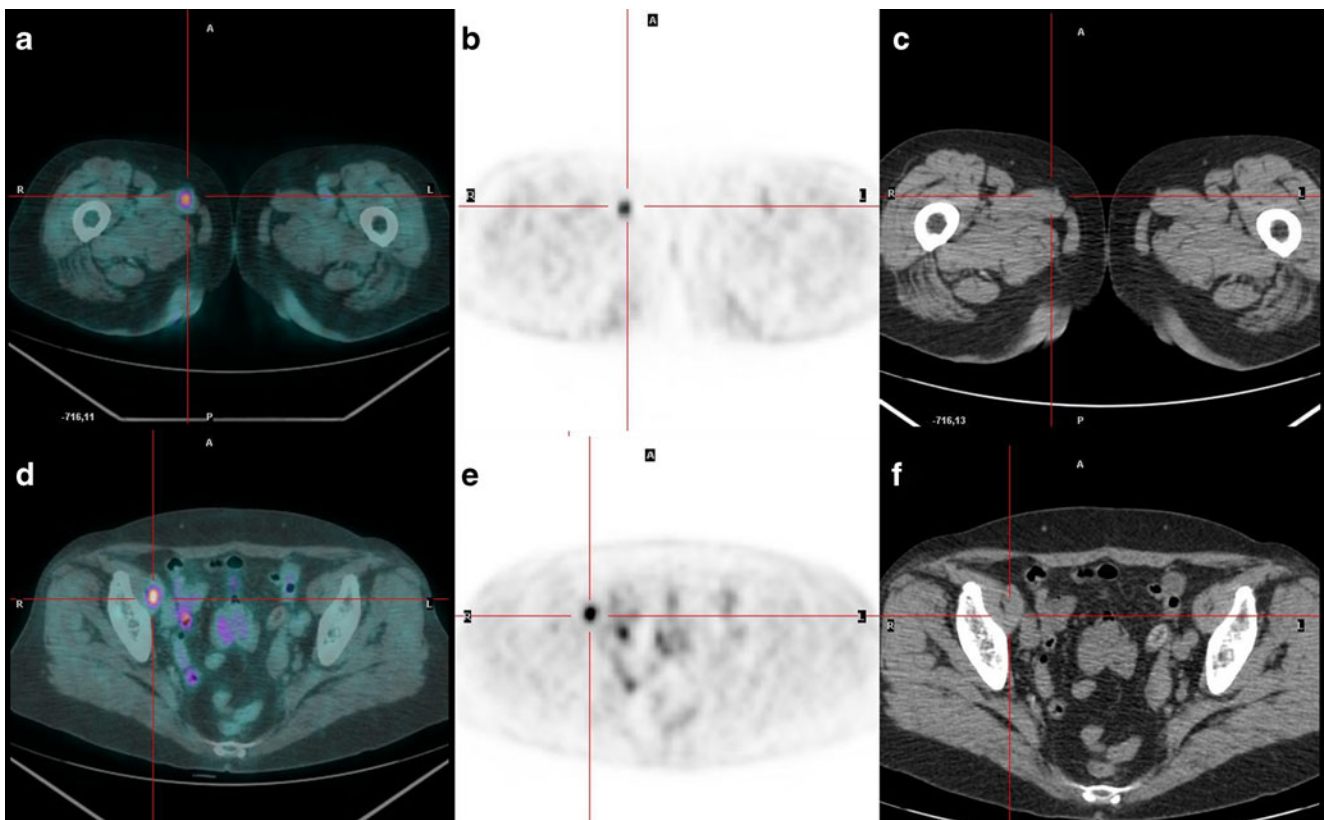


Fig. 1 ^{18}F -FDG PET/CT confirms the presence of the lesion revealed by ^{131}I scan and shows also two muscular distant lesions, involving the right adductor longus muscle (**a** PET/CT fused transaxial images, **b** PET transaxial images, **c** CT transaxial images) and right iliopsoas muscle (**d** PET/CT fused transaxial images, **e** PET transaxial images, **f**

CT transaxial images). The lesions were confirmed as metastases from papillary carcinoma by biopsy. To the best of our knowledge, this is also the first described case of a double distant muscle metastasis imaged with ^{18}F -FDG PET/CT

Conflict of interest None.

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