

Clinical Image

Excessive β -Human Chorionic Gonadotropin Elevation in a Patient with Inguinoscrotal Liposarcoma

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A 77-year old patient presented with a 25 x 10 cm left-sided scrotal mass after inguinal exploration for suspected hernia (Figure 1A, 1B). Abdominal and thoracic CT scan did not show metastatic spread (Figure 2A). β -human chorionic gonadotropin (β -HCG) was 4003U/l (normal: <2.5), other markers were within normal range. Radical orchiectomy and hemiscrotectomy were performed revealing dedifferentiated liposarcoma with leiomyosarcomatous elements and β -HCG expression (Figure 1C, 1D). After transient decrease to 3500U/l β -HCG rose to >5000U/l. ¹⁸F-fluoro-desoxyglucose positron emission tomography/CT revealed wide-spread metastases (Figure 2B) and the patient died 10 weeks after initial diagnosis.

Even in the presence of metastases, non-trophoblastic tumors are rarely associated with elevated β -HCG levels [1]. Metastatic retroperitoneal dedifferentiated liposarcoma has, however, been found associated with a very high β -HCG level (18.430U/l [2]). The current case illustrates that inguinoscrotal sarcoma may be associated with excessively elevated β -HCG levels at an apparently localized stage.

References

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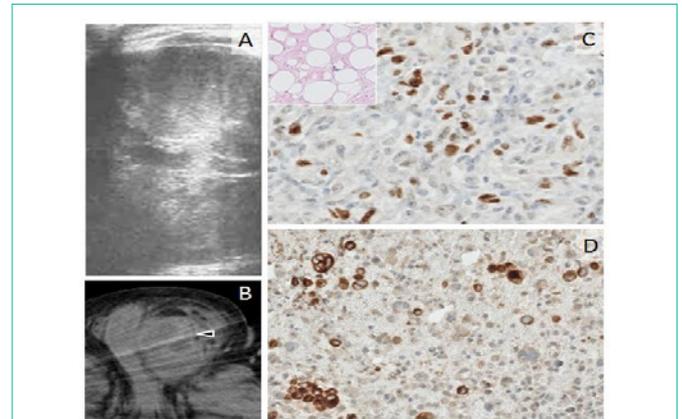


Figure 1: Primary tumor. A: Ultrasound image; B: Contrast medium-enhanced computed tomography image (arrowhead: tumor); C: Immunohistochemical staining for MDM2 (original magnification x400), inset: well differentiated area of liposarcoma; D: immunohistochemical staining for β -HCG (original magnification x100). MDM2 fluorescence in situ hybridization revealed high level amplification in 100% of the tumor cells confirming the diagnosis of dedifferentiated liposarcoma.

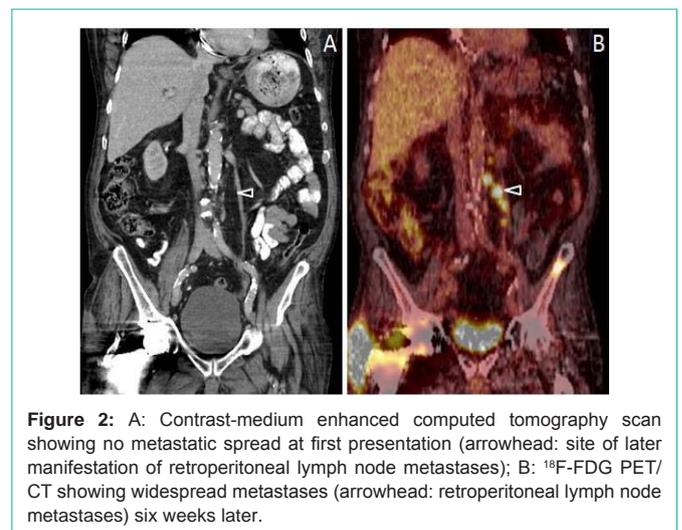


Figure 2: A: Contrast-medium enhanced computed tomography scan showing no metastatic spread at first presentation (arrowhead: site of later manifestation of retroperitoneal lymph node metastases); B: ¹⁸F-FDG PET/CT showing widespread metastases (arrowhead: retroperitoneal lymph node metastases) six weeks later.