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Exceptional Lymphographic Findings in a Benign Retroperitoneal Tumour

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Summary

A benign teratoma, with lymphographic findings resembling the most reliable criteria for metastases is described.

Introduction

Lymphographies have been performed for about 20 years and have gained an established position in roentgen diagnosis, particularly in the diagnosis of retroperitoneal diseases, because of the difficulties involved in taking and investigating histological samples.

The main indications for lymphography are primary and secondary lymph node diseases. The lymphographic findings in lymphomas and metastases have been described in detail, and false interpretations of lymphograms are probably rare when the malignant disease is far advanced. However, we present here the lymphographic findings of a benign retroperitoneal tumour simulating massive metastases, thus leading to a false diagnosis.

Case Report

Two and half years ago a 29-year old male patient was admitted to hospital because of pain in the back. In urography (Fig. 1) and renal arteriography an elongated paravertebral mass was seen to dislocate the left kidney and ureter. In lymphography some lumbar lymph nodes on the level of L_{I-IV} were seen to have been destroyed subtotally, and there were small defects in many nodes. The tumour dislocated and occluded the lymphatic vessels and some fine vessels could be seen in the tumour area (Fig. 2). The lymphographic findings concerncing the paravertebral mass were interpreted as metastases, especially in view of a "rim sign".

The patient was operated on, and a large tumour with several cavities and sharp contours was found and removed entirely, together with all the aortic nodes near to the tumour (Fig. 3). Histologically the tumour was a benign teratoma, and only inflammatory changes were found in the nearby lymph nodes. The patient recovered well and has been symptomless.

Discussion

It is usually possible with the aid of lymphography to decide whether a retroperitoneal

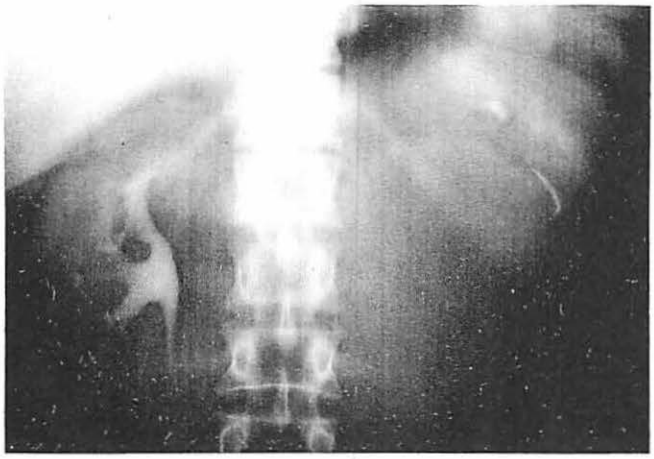

Fig. 1: Intravenous urography. The left kidney is dislocated laterally and upwards. A soft tissue mass is located between the vertebral column and the kidney.

Fig. 2: Lymphography 24 hours after injection of the contrast medium. Some aortic lymph nodes on the left are subtotally destroyed and small defects can be seen in the nodes. There is still contrast medium in the vessels, which are dislocated.

tumour is lymphatic or extralymphatic, benign or malignant. However, differential diagnostic difficulties exist, and certain benign inflammatory changes in particular may simulate malignancy (2, 3). Furthermore, small lymph node metastases are difficult to demonstrate and differentiate from fibrolipomatous changes (4). As the tumour grows the diagnosis becomes easier, and single or multiple defects with a diameter of over 10 mm have been regarded as quite reliable criteria of metastasis, especially if the "rim sign" or "Eierbechers" can be demonstrated (1).

Our patient's lymph nodes showed large defects, subtotal destruction and the "rim sign". Hence the metastases were considered adequately confirmed. The tumour and surrounding lymph nodes were removed and removal of all the suspect lymph nodes confirmed radiologically. The tumour seemed benign on operation and its surrounding nodes proved to be so histologically. Although benign retroperitoneal tumours usually only dislocate lymph vessels and nodes, this case shows how sometimes a benign tumour may cause lymphographic findings typical of advanced metastases.

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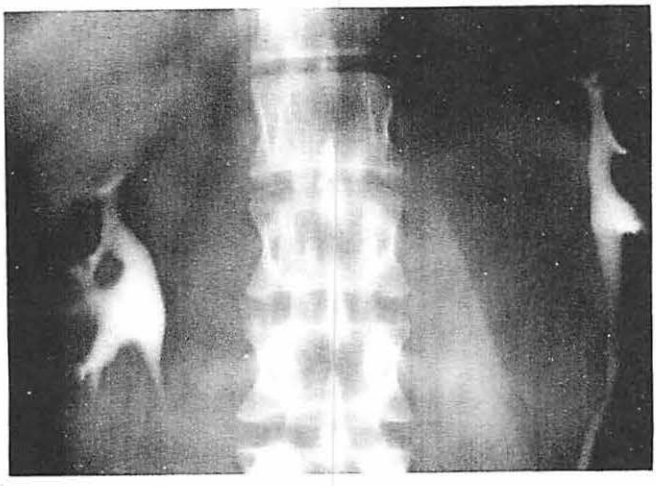

Fig. 3: Follow-up urography two and half months after the operation. The tumour and nearby nodes have been removed. The left kidney is still dislocated.

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