FEOKROMOSİTOMA : BİR OLGU SUNUMU

PHEOCHROMOCYTOMA : A CASE REPORT

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Özet

Bu raporda 16 yaşındaki genç bir hastada tesbit edilen bir feokromositoma olgusu sunulmaktadır. Tümoral kitlenin kısmen renal artere de bası yapması nedeniyle ilginç bulunmuştur. Tümörün cerrahi olarak çıkarılmasından sonra bütün semptomlar düzelmiştir. Nadir karşılaşılması nedeniyle bu olgu takdim edilmiştir.

Anahtar kelimeler : *Feokromositoma, Hipertansif kriz, Adrenal tümör.*

Summary

A sixteen year-old man with pheochromocytoma was introduced in this report. It was interesting that the tumoral mass partially pushed to renal artery. After the tumor was removed surgically, all symptoms were disappeared. Because that case is a rare one, it was presented.

Key words : *Pheochromocytoma, Hypertensive crisis, Adrenal tumor.*

AÜTD 1996, 28:235-236 **MJAU 1996, 28:235-236**

Pheochromocytoma is a catecholamine-producing tumor, which originates from the chromaffin cells of the sympathoadrenal system. Its incidence is 0.95 per 100,000 person in a year. It is seen in hypertensive patients as a rate of 0.1-1 % (1). Therefore, this case was presented to emphasize pheochromocytoma, which is uncommon but important cause of hypertension.

Case Report

A 16-year-old man was admitted to the department of nephrology and hypertension with a history of headache, sweating, palpitation, nause and vomiting. His complaints had been started one year ago, and were paroxismal with symptom-free intervals between attacks. Symtom-free intervals were approximately 10-15 days, and attacks were sustaining for 1-2 days. When he was admitted to our clinics, radial pulse was 120 per minute and rhytmic. Arterial blood pressure (BP) was 190/100 mmHg on right arm with an aneroid sphygomanometer following a rest of 15 minutes at supine position. In addition, grade III hypertensive retinopathy was present. Urinalysis, and BUN, serum creatinine and fasting serum glucose levels were normal. Urinary vanillylmandelic acid (VMA) level was high (33.4 mg/24h). A hypoechoic and spherical mass was seen at superior pole of right kidney in abdominal sonography. In superior abdominal computed tomography (CT), a mass of 60x70 mm in diameter was observed next to upper pole of right kidney (Fig.1). Then, renal digital subraction angiography (DSA) was performed. A mass of 60x70 mm, which is supplied partly by upper pole artery of renal artery and partly by arteries originating from aorta, was detected in medial segment of superior pole of right kidney (Fig.2). It was seen that this mass pushed to renal artery toward anterior and inferior, and it caused a minimal stenosis. Following both CT and DSA, an attack including hypertension, tachycardia and sweating occured. BP increased to a high level (240/150 mmHg) and was cotrolled by sodium nitroprusside infusion. Although prazosin 3x5 mg per day, lisinopril 1x10 mg per day and nifedipine 3x10 mg per day were administered for tratment of hypertension, BP could not exactly cotrolled. Patient was transported to the General Surgery Clinics, and was operated at 35th day of hospitalization. Right adrenal gland, which has a 60x70 mm mass, was excised. There was not metastasis. Pathological diagnosis of specimen was epithelial type of Pheochromocytoma. High blood pressure and high urinary VMA level of the patient fell to normal range following operation.

Discussion

Of the pheochromocytomas, 90 % are intra-adrenal in location as described in our patient, 10 % are extra-adrenal (2).High levels of urinary catecholamines, VMA and metanephrines are biochemical confirmation tests of the suspected diagnosis of pheochromocytoma (3). Our patient had also high VMA. For determination of localization of the tumor are performed ultrasonography (4). Computerized Tomography (CT), ^{131}Iodine methyliodobenzylguanidine (^{131}I-MIBG) scintigraphy, multiplanar Magnetic Resonance

Figure 1. *CT Scan of Superior Abdomen, Showing Approximately a Mass of 60x70 mm in Right Adrenal*

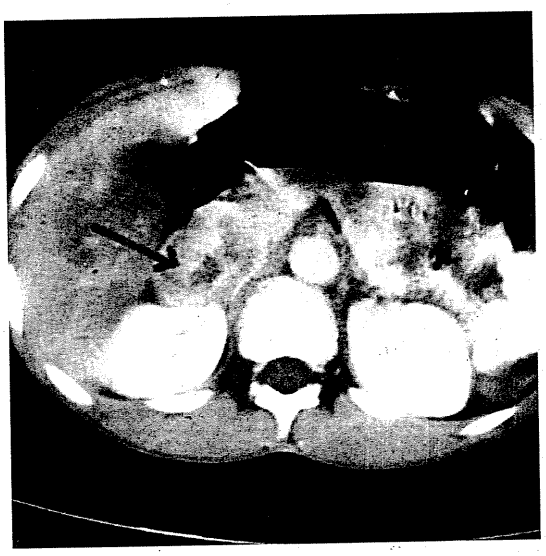
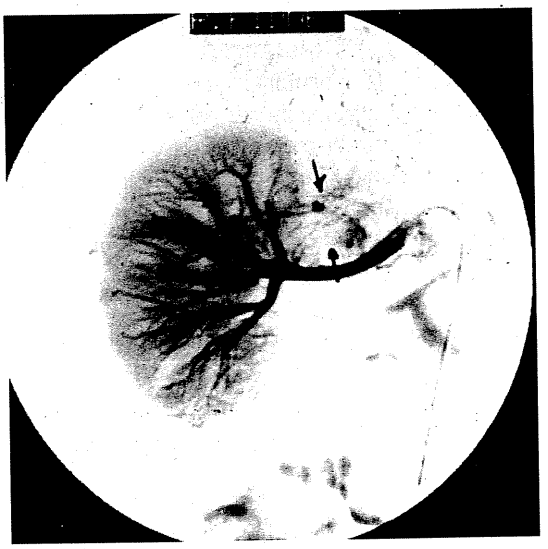


Figure 2. *DSA Scan of the Right Adrenal, Showing a Mass of 60x70 mm and the Blood Supply of the Mass*



Imaging (MRI) (5), and selective arteriography with subtraction (6). ^{131}I-MIBG provides a safe, sensitive, spesific and noninvasive tecnique for locating pheochromocytoma, and is the initial localizing procedure of choice due to its ability to screen the whole body, especially in the detection of extraadrenal pheochromocytoma (7). However, ^{131}I-MIBG is not readily available, and is expensive ($ 600/2mCi). In our patient, a mass was seen by ultrasonography and CT in right adrenal, and size of this mass was 60x70mm in CT. Adrenal lesions less than 2 cm are not visualized by computed tomography and ultrasonography /4,8). Angiography distinguishes this small adrenal tumor (9). In addition, it provides information regarding the blood supply of the tumor for surgeon (3). DSA was performed in our patient before surgical operation. CT and angiography may precipitate a hypertensive crisis (9), as shown in our patient. As a result, pheochromocytoma is uncommon, but one should take it consideration in etiological investigation of hypertension because it is treated radically by only surgical excision.

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