Phaeochromocytoma

Pages with reference to book, From 196 To 198

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Abstract

Phaeochromocytoma is a surgically curable condition and every effort should be made for early diagnosis and treatment. Failure to diagnose may lead to unnecessary delay in treatment and cause suffering to the patient (JPMA 34 196, 1984).

Case Report

A 22 years female presented in 1975 with a solitary nodule in the right lobe of thyroid glands which was removed. Histological examination of the nodule was reported as papillary carcinoma. No evidence of metastasis was found on investigation. Here family history showed that she had three brothers and four sisters and one brother has neurofibromatosis. A strong family history of hypertension, diabetes mellitus and Ischaemic heart disease was also present.

The patient got married in 1979. She had an abortion in 1980 for which she was seen by a Gynaecologist but no cause was found. The following year she was admitted for attacks of numbness and tingling, severe headache with vomiting and palpitations. The attacks used to come every two to three months. They became more frequent as the time passed. The attacks were precipitated by physical exertion, mental stress, sexual intercourse, straining at defaecation, (Patient was usually constipated) and bending down. The headaches were generalised, throbbing, accompanied by vomiting and lasted for ten to fifteen minutes. During these attacks she used to become deaf. She was investigated but no defmite diagnosis was made. Thyroid studies were normal. She was discharged on tranquilizers.

She was re-admitted to the gynaecology and obstetric unit of the same hospital at the end of 1981 for the above mentioned symptoms and a miscarriage. She had erosion of the cervix which was not healing despite treatment. However no diagnosis was made and she was discharged on Tab. valium (Diazepain).

Her symptoms persisted. She became more anxious and refused to see any doctor. During the attacks she also developed severe stabbing, retrosternal chest pain, tremors of her hands, flushing and sweating. She would become pale and exhausted at the end of the attacks.

In 1982 she was admitted for delivery. During her pregnancy the attacks had become more severe and frequent. Her blood pressure during the attacks was 200/125 mm Hg. Examination of Cardiovascular system, Respiratory system and Central Nervous system revealed no abnormality. Abdomen was normal and the attacks were not precipitated by palpitation. The results of various investigation done are shown in the table.

Table Investigations.

Investigations	
Hb	15 gms %
ESR	39 mm in the Ist hr. TLC 8000/Cumm
Urine analysis	Normal
Random blood sugar	194 mg %
Glucose tolerance test	Abnormal
Vanillylmandelic acid (VMA)	22.8 mg/24 hrs Normal range 0.7–6. 8 mg/ 24 hrs.
x-ray chest : P.A. and lateral views	Normal
Electrocardiogram	Normal
Serum calcium	9.5 mg% (Normal 9-11mg%)
Serum inorganic Phosphorous	3.8mg% (Normal 2.5–4.5mg%)
Serum Alkaline phosphatase	8.8 K.A. Unit (Normal 3-13 K.A. units)
Intravenous pyelogram	Normal
Sonography	Revealed a rounded opacity on top of the right kidney

The clinical diagnosis of pheochromocytoma was confirmed byraised. urinary VMA levels and the presence of a round shadow over the upper pole of right kidney on Ultra-son-ography.
Preoperatively her symptoms were controlled with 'Minipress' and Phenoxybenzamine. During operation cardiac arrythmia precipitated by handling of the tumour, was controlled with intravenous propranolol. A second tumour not shown by ultra-sonography was discovered on the left side while checking the sites for additional tumours. The blood pressure shot up again when the second tumour was palpated and multi-pie ventricular ectopics occurred. Three 1/V injections of 0.5 mg propranolol were required for control. No specific antihypertensive drug was required for blood pressure control during the operation.
Her blood pressure fell to 70/60 mm of Hg soon after the excision of her second tumour. Levophed infusion was set up to maintain the B.P. at 90-100 mm of Hg diastolic which was discontinued after 3 hours. She received six pints of fresh blood.
Her post operative course was uneventful. She was discharged from hospital 2 weeks after surgery and has had several followup appointments. She has remained symptom free.

Discussion

Pheochromocytoma is not a common cause of Hypertension and its diagnosis is not easy as is shown by the variety of tests used for diagnosis. The level of VMA in 24 hours urine specimen is one of the oldest tests used in diagnosis Recently more sophisticated techniques like radioenzyrnatic assay of catecholamines in plasma. Scanning with (13 1) meta-iodo-benziguanidine (MIBG) and platelet Catecholarnine levels have been used for diagnosis (Brovo et al., 1979 ; Aronoff et al., 1980 ; Sisson et al., 1981; Zweifler et al., 1982). Techniques are however not available in our country therefore it is recommended that in all patients with suggestive symptoms or in young hypertensives, urinary VMA

levels and ultrasonography should be done to exclude (or otherwir) the possibility of pheochromocytoma; although uncommon pheochromocytom is after all not so rare.

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