CODEN [USA]: IAJPBB ISSN: 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES
http://doi.org/10.5281/zenodo.2647576

Available online at: http://www.iajps.com ***Research Article***

CASE STUDY - PHEOCHROMOCYTOMA

[1]Dr Muhammad Jahanzeb, [2]Dr Muhammad Musab Abdullah, [3]Dr Hani Saeed,
DHQ Hospital Layyah[1], BHU Mangrotha Tehsil Taunsa District DG khan[2], MO DHQ Muzafargarh[3]

Article Received: February 2019 **Accepted:** March 2019 **Published:** April 2019

Abstract:
Pheochromocytoma is unusual catecholamine emit tumor start typically from adrenal medulla and maker sign and symptoms proper to acute catecholamine release from tumor. A 20 years old young man was admitting in Public Hospital with complaint of raging attack of palpitations, faintness, Fever from previous 15 days and nausea from 3 days, History of weight loss(10kg) and sleep distraction. Clinical idea of chromaffin cell tumor is well-known by twenty-four hours epinephrine level, abdominal Ultrasound and Computerized tomography scan. Surgical removal of pheochromocytoma was done after two weeks of preoperative arrangements. Preoperative variation of Blood Pressure was well organized by Intravenous fluid, small and ephedrine. From First post-operative day Blood pressure regains to normal range. Paraganglioma is a rare reason of hyperpiesia. Whether, the identification of this tumor is dominate, the outcome could be tragic, even deadly; though, if it is recognize, has chances to be cured,as being one of the reason of surgically improveable high blood pressure. (Neuman, Pawlu & Peczkowska, 2014)

Corresponding author:
Dr. Muhammad Jahanzeb,
DHQ Hospital Layyah

QR code

Please cite this article in press Muhammad Jahanzeb et al., ***Case Study - Pheochromocytoma.,*** *Indo Am. J. P. Sci, 2019; 06(04).*

INTRODUCTION:

Adrenal paraganglioma are special neuroendocrine tumors that occur from chromaffin cells of the adrenal medulla. poisonous pheochromocytoma is define as the occurrence of metastatic extend in tissue where chromaffin cells are not usually there. This case report explains the case of a decline horrible pheochromocytoma, extend to the right live lobe, better pole of the right kidney, latter right hemi diaphragmatic pillar, lesser performed, with resection of all the exaggerated tissues and regional lymphadenectomy. No adjuvant treatment (radiotherapy or chemotherapy) was known. Complete clinical, biochemical and radiological reduce was achieve, with normalization of metanephrine and normetanephrine. To date, six years after surgery, the pt remains asymptomatic and normotensive without taking any hypertensive medication (Arna-Leon, Sanchez, Suarez, Arroyo, Acosta & Martin, 2016).

Pheochromocytoma is chromaffin cell tumor with a uneven occurrence depending on the observe population.In patients with hypertension the incidence of a PPGL is regarding 0.2% to 0.6% while in patients with an t uncovered adrenal tumour it is about 3% to 7%.physicians are anxious to overlook this tumor because it is connected with important cardiovascular morbidity and catatrophic price when the judgment is missed. Yet,the average wait in the diagnosis is nearly 3 year and it is even neglect during life in 0.05% to 0.1% of the patients as exposed by autopsy studies (Lenders & Eisenhofere, 2017)

Currently, there is no conformity about the volume of surgical attachment in patients with heritable pheochromocytoma. Partial adrenalectomy is associated with a significantly increased risk of local tumor reappearance (in hereditary syndrome each chromaffin cell has a high tumor potential).The re-interventions are connected with a notably increased risk of inta- and postoperative complications. On the added hand, the total bilateral adrenalectomy (in patients with bilateral pheochromcytoma) is related with the necessary for lasting regular corticosteroid therapy and lead to a important degeneration in the value of life. (Benn, Gimenez-Roqueplo, Reilly, Bertherat, Burgess, Byth & Henley, 2016).

Case presentation:

A 20 years old young man was admit in Public Hospital Multan with complaints of convulsive attacks of palpitations, dizziness, Fever from last 15 days and nausea from 3 days,History of weight loss(10kg) and sleep disturbances.On physical examination, patient had abnormal physical findings. Pt vital signs were B.P=100/60, Pulse=96/min, Temp=100F, on Assessement pinched abdomen, Umblicus central. Abdomen is not tender, No viscera palpable, No shifting dryness or fluids thrill. Bowel sounds Audible. Complete Blood Count, Sugar, and Urea,Chest X-rays and ECG were within normal range.

Due to Adrenal pheochromocytoma secondary fever was diagnosed temporarily but the verification of this disease investigations was performed i.e. Serum catecholamine level which was not nearby available. Abdominal Ultrasound shows adrenal mass of 48 x 43mm in axial,53 x 49mm in coronal sections with thick irregular peripheral border of development and internal areas of necrosis.

Then, urinary catecholamine and methanephrine level were performed at the public hospital, a well-known biochemical diagnosis of pheochromocytic. Abdominal computed tomography scan shows adrenal mass at right side in the coronal section, axial, 53x49 mm approximately 48x43mm in size.

Due to his illness patient's health knowledge and health managing pattern is distressed because due to illness his daily activities has disturbed and he said that his illness should be treated as early. Nutritional and metabolic pattern is also disturbed because he cannot take proper diet due this reason he note that his weight has loss. Self-perception and self-concept pattern is also disturbed because he and his family were worried about his illness. Sleep rest pattern is disturbed due to his illness because his cannot sleep properly.

With the opinion of cardiologist and anesthesiologist's patient was prepared for the surgical removal of the adrenal gland. Operation done after fever improved and bed arrange in ICU for post-operative care. An open right adrenal gland was performed with the right sub-coastal incision. Firstly, it was ligated and the tumor was removed.

During operating procedure blood pressure was increased to 260/150mmHg, except for observed fluctuations and fell on BP which could not be recorded after connecting the adrenal vein. The Anesthetist team is managed the situation well by using the esmolol in the vein (acting fast beta Adreno antagonist) during the surgical recruitment and elimination of the tumor. The rapid decrease in blood pressure after the adrenal vein was linked with a rapid mixture of liquid and a large volume of intravenous ephedrine.

Medicines are advised:
Inj oxidil x 1g x I/V x B.D , Inj Risek x 40mg x I/V x OD.Inj Flagyl x 500mg x I/V x TDS , Inj Gravinate x I/V x TDS.
The recovery after the surgery was un eventful and 8th day after the operation patient discharge. First post op day without any medication BP = 110/80mmHg.. Finally, pathology report shows adrenal tumor. The chromaffin tissue of the Disturbed nervous system expands to the urinary bladder to the base of the skull. The common location of the extra adrenal pheochromocytoma is Zuckerkandl, bladder wall, heart, mediastinum and the carotid and glomus jugular bodies.

This tumor is seen in all human's race, but less diagnosed in black, equal frequency in both sexes. This tumor may occur at any time. But the highest rate is between 3rd and 5th decades of life. 10% of malignant. Direct attack of the nearest tissue is the occurrence of deviations in the identification of malignant. Unfortunately, there is no credible clinical, biochemical or histological features of the unpleasant decision of the benign tumor.

The clinical appearance of the Tumor is the result of the secretion of radical catecolamine. secretions are naturally, sometimes conversely, and contain secretion and epinephrine. Dopamine is rarely excreted. The Relative secretion levels also vary in tumor. In the diagnosis is an excessive biochemical verification. The plasma Metanephrine test has a high concern (96%) for the detection of a tumor, but has less specificity. On the contrary, the adrenal antagonist is given 24 hours, if necessary, as require by B.P, Heart rate and central venous pressure.Sodium Nitroprosian , also uses direct vascular to manage high blood pressure during operation

DISCUSSION:

It is a rare tumor consisting of chromaffin tissue cells, which are classically found in the adrenal gland. Only about 15% of this disease is dilated through the tissue of the extra adrenal chromaffin. The 24 hours urine collected for the catecholamine and metanephrine is 87.5% accepted and 99.7% is its specificity.Metastasis and this tumour contain diagnose clinically.Through MRI and CT scan this tumour is detected and has 100%reprting (Arna-Leon et al., 2016).

The treatment of hypertension is the surgical resection.Before surgery Alpha and beta blockers start so that control the high blood pressure during operation.In the preparation of surgery Phenoxybenzamine is used Doxazosin,Prazocin and Terazocin are also used. If trachycardia or arrhythmias are present additional beta blockers are necessary. .(Benn,et al., 2016).

For the success of the operation experienced anesthesiologist and surgeon are crucial. There is a risk of a high blood pressure disaster due to excessive catecolamine libertarian during tumor surgery.The use of Tumors or antihypertensive crisis with Alpha congestion before surgery even after attaching the adrenal vein cannot be completely prevented.The monitoring of Central venous catheter, invasive arterial and cardiac is necessary. (Lenders et al., 2017)

When the fluid tumor is removed before the operation, it is advisable to stay in the sudden development of blood vessel bed. Nitroprosian sodium, also uses the direct peripheral vascular management of the high blood pressure in operation. Rapid decline of blood pressure during the binding of Tumor venous drainage is common; At this point there may be a need for a rapid combination of large liquid volume and ephedrine in the vein as the Expans blood vessel section.

The progress of Surgical management from many years. Before the adrenal gland was eradicated, the abdominal advance was used in some centres, and the abdominal and wing progression in the median line was often used At this point there may be a need for a rapid combination of large liquid volume and ephedrine in the vein as the Expans blood vessel section (Neuman, Pawlu & Peczkowska, 2014).

CONCLUSION:

The Tumor is usually referred to as a 10% tumor, because 10% are mutually, malignant, out of the adrenal gland, suddenly, from family and children. The only reason for hypertension is a treatable surgical tumor. Despite high blood pressure is the causative agent, it is necessary to keep detecting a high blood pressure population of 0.6%, not only for the possible treatment of hypertension, but also from the potential fatal effects of the unrecognised tumor, though about

REFERENCES:

1. Arnas-Leon, C., Sanchez, V., Suarez,A. D. S., Arroyo, S. Q., Acosta, C., & Martin, F. J. M. (2016). Complete remission in metastatic pheochromocytoma treated with extensive surgery. Cureus, 8(1).
2. Alace, M., P., Jesus, S., & Fonseca, C. (2015).

Pheochromocytoma: clinical review based on a rare case in adolescence. Case Reports, 2015, bcr 2015211184. Reports, 2015, bcr 2015211184.

3. Benn, D.E., Gimenez-Roqueplo, A. P., Reilly, J. R., Bertherat, J., Byth, K. & Henley, D. (2016).Clinical presentation and penetrance of pheochromocytoma/ Paraganglioma syndrome.
4. Farrugia, F. A., Martikos, G., Tzanetis, p., Charalampopoulos, A., Misiakos, E., Zavras, N., & Sotiropoulos, D. (2017).
5. Lenders, J. W., & Eisenhofer, G. (2017). Update on modern management of pheochromocytoma and paraganglioma. Endocrinology and Metabolism, 32 (2),152-16.
6. Ma, C., Sun, E., & Lu, B. (2018). Giant malignant pheochromocytoma in an elderly patient: A case report. Medicine, 97 (19).
7. Neumann, H. P., Pawlu, C., Peczkowska, M., Bausch, B., McWhinney, s. R., Muresan, M.,… & Hoegerls, S. (2014). Distinct clinical features of paraganglioma syndromes associated with SDHB and SDHD gene mutations. Jama, 292(8), 943-951.
8. Pradipta, L. D., & Prajitno, M. E. (2015). Pheochromocytoma: A Forgotten cause of Hypertension.