CODEN [USA]: IAJPBB ISSN: 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES

http://doi.org/10.5281/zenodo.2528531

Available online at: http://www.iajps.com *A Case Report*

IPSILATERAL THYROID HEMIAGENESIS AND HYPERPARATHYROIDISM

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Abstract:

In this study, a mature female is included. She was suffering with ipsilateral thyroid hemiagenesis and hyperparathyroidism. Thyroid hemiagenesis is a hereditary disease and not commonly found. A little invasive parathyroidectomy eradicated parathyroid adenoma. These lobes are associated by an isthmus. There is no obvious report regarding the possibility of thyroid hemiagenesis. In majority of the cases, thyroid related disorders such as nodular goiter and Graves disorder were observed. The research study was about a female whose age was 27 years. The study was organized at the Endocrinology Department in January 2017. The patient was suffering with fatigue, vomiting, nausea and abdominal discomfort. The patient was checked physically, except a little abdominal stiffness, other results were normal.

Keywords: *Primary hyperparathyroidism, Right thyroid hemiagenesis, Parathyroid adenoma.*

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Please cite this article in press Abdul Sami et al., ***Ipsilateral Thyroid Hemiagenesis and Hyperparathyroidism.,*** *Indo Am. J. P. Sci, 2018; 05(12).*

INTRODUCTION:

The disorder of thyroid hemiagenesis is hereditary and not found commonly. There are two lobes of thyroid gland. These lobes are associated by an isthmus. There is no obvious report regarding the possibility of thyroid hemiagenesis. In majority of the cases, thyroid related disorders such as nodular goiter and Graves disorder were observed [1,2]. The coupling of hemiagenesis is with hyperparathyroidism is not found commonly [3, 4]. In this study the cases of ipsilateral thyroid hemiagenesis and hyperparathyroidism were discussed.

CASE REPORT:

The research study was about a female whose age was 27 years. The study was organized at the Endocrinology Department in January 2017. The patient was suffering with fatigue, vomiting, nausea and abdominal discomfort. The patient was checked physically, except a little abdominal stiffness, other results were normal. According to laboratory results, the levels of thyroid stimulating harm one (TSH) were (1.82 ULU / ML us normal value of 0.270 – 4.20 ULU / ML) , levels of vitamin D were (3.92 mg / dl vs. normal value of > 30mg/dl), intact parathyroid hormone (PTH) was (1542pg / ml vs. normal value of 2.5 – 4.5 mg / dl) , levels of serum were high (18.7 mg/dl vs. normal value of 8 , 6 – 10 ,5 mg/dl) and high levels of urine calcium (1434 mg/24h vs. 0.250 mg/24h). Other tests were completed after the detection of primary hyper parathyroid. Ultrasound was performed cervically. It shown that right thyroid lobe is absent and presence of left thyroid lobe with the measurement of 18 × 20 × 54 mm in size. The size of hypoechoic lesions was 20 × 11 which was comparable with right side parathyroid adenoma (Figure – 1).

Figure No 01: Cervical ultrasound revealed left thyroid lobe, but the absence of right thyroid lobe and a hypoechoic lesion compatible with a parathyroid adenoma on the right side.

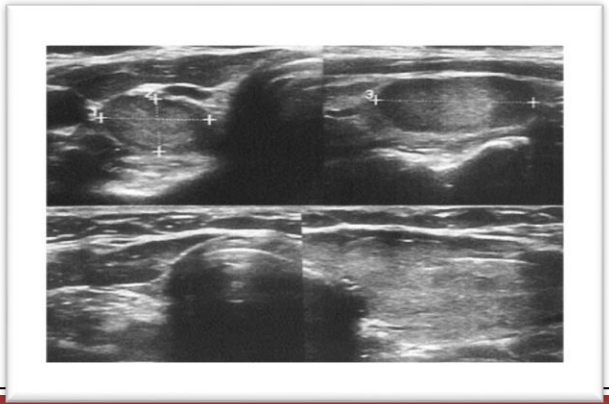

Figure No 02: Thyroid scintigraphy revealed the absence of the thyroid right lobe.

Thyroid scintigraphy was also performed. According to results of these scintigraphs, absence of right thyroid lobe and presence in right lobe were reported respectively. Presence of any syndrome was not reported in patient. With the help of little invasive parathyroidectomy, parathyroid adenoma was eradicated. After the operation, the levels of calcium, serum calcium and PTH of patient were evaluated. They were found 8.3 mg/dl, 11.9 mg/dl and 76pg/ml respectively. Next day, patient was sent to home.

DISCUSSION:

In our study, the patient was presented with serious indications of hypercalcemia. The levels of PTH and calcium in patient were high. In history, because of thyroglossal duct, hyperplasia or parathyroid adenoma and thyroid neoplasm, thyroid hemiagenesis has been observed coupled with hyperparathyroidism and Hashimoto's thyroiditis [5, 6]. Although, this coupling is not very frequent. The data about the incidence of thyroid hemiagenesis is not significant. But in the paediatric community, the incidence of 0.002 – 0.5 % is reported [7, 8]. Women are mostly victim of this disorder [9, 10]. Usually, during the imaging of neck or neck pathology, these patients are diagnosed. The present case was also diagnosed while parathyroid imaging. There is no obvious reason found that lead to thyroid hemiagenesis. Lack of left lobe may cause thyroid hemiagenesis. Same family members may be the victim of thyroid hemiagenesis [11]. This abnormality could be influenced by hereditary factors. There is no information regarding the path way of thyroid hemiagenesis. Another P thyroid hemiagenesis was not found in any members of patient's family, when assessed.

CONCLUSION:

The disorder of thyroid hemiagenesis is not common. So, in hospitals, such cases are very rare. In many patients, thyroid hemiagenesis is detected during the operation. In a clinical hypothesis, the deformity may be detected during ultrasound imaging. Whereas, individual suffering with hyperparathyroidism, thyroid hemiagenesis can be detected through TC – 99m scintigraphy.

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