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Short Communication
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Ultrasonographic Evaluation of Cutaneous and Subcutaneous Tissue in an Empty Sella

*Unlu Z**

Department of Physical Medicine and Rehabilitation, Celal Bayar University School of Medicine, Turkey

Abstract

The aim of this study was to evaluate the skin and subcutaneous musculoskeletal involvement of hypothyroidism and myxedema due to a differential diagnosis of Pendred syndrome. She was operated on 2 June 2018 for epidural hematoma, induced head trauma. She was hospitalized in the intensive care unit for 3 weeks. He presented with less than fifty percent limitation of range of motion in both upper extremities after discharge. She had a history of pituitary insufficiency and congenital hearing loss. Patient was using Hydrocortisone 5 mg 3.1, levotrioxin 125 mcg 1.1, norgestrel-estradiol 2 mg 1.1 and hearing aid. Phenotypically, body mass index was low (15 kg/m^2) and growth retardation was present. Endocrine consultation was requested for differential diagnosis of Pendred syndrome and the syndrome was excluded. Elbow, shoulder and right wrist joints were applied electrotherapy and stretching exercises. At the end of 1 month, full range of motion was achieved. In the lower extremity environment measurement for myxedema, 1 cm more diameter difference was measured in the left leg. Cutaneous-subcutaneous ultrasound revealed no signs of myxedema and the cutaneous and subcutaneous tissue were normal. Pendred syndrome; is a congenital condition that can make changes under the skin, hypothyroidism and myxedema. There is not enough information about cutaneous and subcutaneous involvement in hypothyroidism including Pendrend syndrome in the literature. Although there was not Pendred syndrome our case, hypotroidic and this issue was pointed out.

Introduction

Hypothyroidy, myxedema is a situation that can make cutaneous, subcutaneous changes. Cutaneous, subcutaneous findings can be demonstrated by ultrasonography. Pendred syndrome is the syndrome that should not be forgotten in differential diagnosis of hypothyroidism [1]. If there is hearing loss in hypotroidic patient, it should be considered in differential diagnosis.

Materials and Methods

A 25-year-old female patient was admitted to our clinic with the complaint of limitation of motion in the right and left upper extremities. The patient was operated on 2 June 2018 due to epidural hematoma after head trauma. He stated that he had been hospitalized and treated in the intensive care unit for 3 weeks. (8 Eylül Hospital Intensive Care Unit).

She had a history of hypophysis deficiency and congenital hearing loss. Patient was using Hydrocortisone 5 mg 3.1, levotrioxin 125 mcg 1.1, norgestrel-estradiol 2 mg 1.1 and hearing aid. Phenotypically, body mass index was low (15 kg/m^2) and growth retardation was present.

In thyroid usg, the thyroid parenchyma was generally decreased, both lobe size decreased and general thyroid vasculature was found to be normal. In cervical X-ray, C3-4, C4-5 disc distance markedly reduced and cervical lordosis were flat.

Pendred syndrome was considered in the case and an endocrine [2] consultation was requested.

Right elbow extension was limited to 10°; left elbow extension was limited to 5°, right wrist dorsiflexion was limited to 10°. Bilateral shoulder internal rotation was painful and 45°. The external rotation of the right shoulder was 45°, and the left shoulder external rotation was 80°. Stretching exercises for elbow, shoulder and right wrist joints were performed after intensive care. Before stretching exercises electrotherapy program was taken. The range of motion was achieved after rehabilitation.

Results and Discussion

In the lower extremity circumference measurement for myxoedema, 1 cm more diameter

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Correspondence:
Unlu Z, Department of Physical Medicine and Rehabilitation, Celal Bayar University School of Medicine, Turkey,
E-mail: sonerarik.ark@gmail.com

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Figure 1: Cutaneous-subcutaneous ultrasound did not reveal any findings related to myxedema. Cutaneous and subcutaneous was normal.

difference was measured on the left side of the legs. Cutaneous-subcutaneous ultrasound did not reveal any findings related to myxedema. Cutaneous and subcutaneous was normal (Figure 1).

Discussion

Pendred syndrome; hypotroidia, myxedemea is a congenital condition that can make changes under the skin. The limitation in the joints was thought to be due to immobilization in the intensive care unit. The differential diagnosis was made in our head trauma case with joint contractures. There was no involvement of Pendred syndrome- myxedema in ultrasonography. There is not enough information about hypothyroid musculoskeletal system involvement in Pendred syndrome [3-5]. Although not Pendred's syndrome, with hypothyroidic empty sella syndrome our patient pointed to this issue.

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