

Poster Session

CASE REPORTS

03. Madelung's Disease in a Young Non-Alcoholic Female From Bangladesh

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Background: Madelung's disease, or multiple symmetric lipomatosis (MSL), is a rare metabolic disorder characterized by painless, symmetrical deposits of non-encapsulated adipose tissue, primarily affecting the neck, shoulders, upper trunk, and proximal upper limbs. Its prevalence is about 1 in 25,000 individuals, more common in middle-aged Mediterranean men having a history of chronic alcohol consumption. The pathogenesis remains unclear, but possible mechanisms include mitochondrial dysfunction, adrenergic-stimulated lipolysis, and brown adipose tissue metabolism abnormalities may play roles. Associated comorbidities include diabetes mellitus, hypothyroidism, dyslipidemia, and hyperuricemia. Potential complications are restricted neck mobility and dyspnea due to compression, and cosmetic disfigurement causing psychological issues. Diagnosis done by clinical examination and imaging techniques such as ultrasonography (USG), computed tomography (CT), and magnetic resonance imaging (MRI), which help to assess adipose tissue extent and rule out conditions like Cushing's syndrome and liposarcoma. Histopathological analysis may be done. Management is complicated by high recurrence rates post-treatment; medical management, surgical excision, and liposuction are the treatments aimed at alleviating symptoms and enhancing cosmetic outcomes. **Case Report:** A 35-year-old female presented to the medicine outpatient department with complaints of gradually progressive, symmetrical swellings around the neck, suprascapular area, and upper chest for the past two years with repeated clinical consultation from different specialities. The swellings were associated with significant cosmetic concern and created psychosocial distress. However, there was no pain, tenderness, or compressive symptoms. There was no history of sudden increase in size, constitutional symptoms such as fever or weight loss, or features suggestive of malignancy. There was no history of smoking, chronic alcohol consumption, diabetes mellitus, thyroid dysfunction, or other endocrine disorders. Her family history was not contributory. Physical examination revealed symmetrical, soft, non-tender, and mobile subcutaneous nodular swellings around the posterior and lateral aspects of the neck, extending to both shoulders, upper part of chest and back, and proximal upper arms. Overlying skin was normal. Systemic examinations yield no abnormalities.

Initial laboratory investigations, including complete blood count, liver function tests, thyroid profile, blood glucose, lipid profile, and serum cortisol levels, were within normal limits. USG of the neck and upper limbs demonstrated multiple homogeneous, hyperechoic subcutaneous lesions suggestive of lipomatous masses. CT confirmed the presence of diffuse symmetric, non-encapsulated lipomatous deposits involving the affected area without evidence of infiltration into deeper tissues or features suggestive of liposarcoma (Figure 1). Histopathology showed mature adipose tissue without evidence of malignancy. Based on the clinical presentation and radiological and histopathological findings, a diagnosis of Madelung's disease was done. The patient was counseled regarding the benign nature of the condition and advised on conservative management, including weight control, dietary modifications, and regular physical activity. Surgical excision and liposuction were discussed as potential options; however, intervention was deferred at this stage due to the patient's preference for non-surgical management. In her follow-up period, she remained without significant progression of the lesions. Conclusion: Presentation of Madelung's disease from Bangladesh is significant because it expands epidemiologic knowledge, enhances diagnostic recognition, and adds clinical insight into a condition rarely described in South Asia.

Key Words: Madelung's Disease, Lipomatosis, Mediterranean

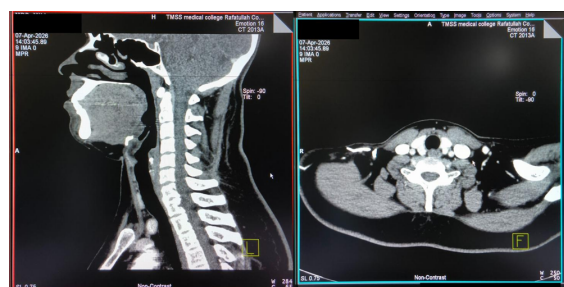


Figure 1: Diffuse symmetrical accumulation of non-encapsulated fatty tissue around the neck extending over shoulder, supraclavicular and suprascapular areas and also upper chest and back.

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