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DOI: <http://dx.doi.org/10.1590/abd1806-4841.20142859>

CASE REPORT

A 48-year-old black male with chronic alcoholism presented with a soft, bulky mass lesion in the posterior region of the neck. According to the patient, the mass had grown slowly and progressively over the course of 5 years, with later development of similar nodules in the upper trunk.

The patient sought care at the dermatology service with a chief complaint of recent weight loss, muscle weakness, ataxia, confusion, and loss of orientation to place and time.

Physical examination revealed a bulky tumor in the posterior neck, with no defined borders on palpation. Other nodular lesions were present bilaterally in the deltoid, trapezius, and quadratus regions and in the posterior triangle of the sternocleidomastoid (Figures 1 and 2).

Histopathological examination of a needle aspiration specimen confirmed the diagnosis of lipoma.

A systemic workup revealed no metabolic changes, only anemia and mild elevation of liver enzyme levels. Abdominal ultrasound was within normal limits. A CT scan of the chest revealed an extensive mass isodense to fat in the trapezius and sternocleidomastoid regions, with no infiltration of adjacent structures (Figure 3). Surgical treatment was deferred in view of the patient's clinical condition.

DISCUSSION

Multiple symmetric lipomatosis (MSL) was first reported by Brodie (1846), while Madelung (1888) described the typical cervical distribution. Its pathogenesis remains unknown. It is characterized by proliferation of brown adipocytes due to a defect in adrenergic-regulated lipolysis, leading to disordered hypertrophy and hyperplasia. There is evidence of mitochondrial abnormalities and genetic translocations in chromosomes 12 and 3.¹⁻³

Approximately 300 cases have been reported in the literature. It is most frequent in adult (age 30-60 years) males (with a 20:1 predominance), and is comorbid with alcoholism in 60-90% of cases.^{4,5}



FIGURE 1: Symmetrically distributed cervicothoracic nodules and masses



FIGURE 2: Occipital nodules and bulky cervical and suprascapular masses, in stark contrast to the patient's emaciated trunk

Received on 10.06.2013.

Approved by the Advisory Board and accepted for publication on 01.07.2013.

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Financial Support: None.

Conflict of Interests: None.

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FIGURE 3: Computed tomography scan of the chest. Transverse section obtained at the level of the clavicle, showing an extensive mass isodense to fat in the posterior neck, trapezius, and deltoid regions, with no evidence of infiltration of adjacent structures

MSL may present as one of two phenotypes. In type 1 (Madelung's disease), lipomatosis is well-circumscribed, forming nonencapsulated masses distributed symmetrically across the upper body. Cervicothoracic lesions take on a "horse collar" appearance, whereas masses in the posterior neck and upper back resemble a "buffalo hump" or kyphosis.^{1,2} Type 2 (Launois-Bensaude syndrome) affects both sexes equally, and is associated with a gynoid fat deposition pattern, with masses affecting the thighs and hips as well as the upper back and deltoid region, imparting a pseudoathletic or obese appearance.^{1,6}

The natural history of MSL is variable. Masses grow rapidly within a few years of onset and stabilize thereafter. Ethanol consumption appears to potentiate the development of lesions in genetically predisposed

patients, by downregulation of adrenergic receptors and inhibition of alpha oxidation of adipose tissue, leading to a decline in lipolysis and increase in lipogenesis.^{4,6,7}

Associations with hyperlipidemia, thyroid dysfunction, hypogonadism, and diabetes have been reported, as well as with myoclonus, cerebellar ataxia, peripheral neuropathy, and proximal myopathy.

Diagnosis is clinical, based on the characteristic presentation. However, imaging may be performed to diagnose the extent of the lesions, assess potential involvement of the mediastinal cavity, and aid surgical planning. The histopathological appearance of MSL lesions is indistinguishable from normal adipose tissue, but adipocytes are smaller and multivacuolated, with slight interstitial fibrosis and acid proteoglycan deposition.^{8,9}

A multidisciplinary treatment approach is required, with cessation of alcohol intake to slow the progression of the disease and decrease postoperative recurrence rates; management of comorbidities; and lipectomy or liposuction. Lesions tend to recur because the plane of dissection is poorly individualized. Surgical resection is indicated in cases of cosmetic deformity or compressive symptoms (such as difficulty breathing).^{8,10}

Use of hypolipidemic agents such as fibrates has been reported, with varying results.^{1,10}

Prognosis is good. Complications of alcoholism are the leading cause of mortality. □

Abstract: A 48-year-old male patient with chronic alcoholism presented with a soft, bulky, asymptomatic, and slow-growing mass in the posterior region of the neck, as well as nodules in the deltoid region and posterior triangle of the sternocleidomastoid muscle. Needle aspiration confirmed the diagnosis of lipoma. Multiple symmetric lipomatosis (Madelung's disease) is a rare proliferation of adipocytes, of unknown etiology, most common in middle-aged men and mainly associated with alcoholism. It predominantly affects the neck and upper trunk, causing compressive symptoms or a imparting a pseudoathletic appearance. Surgical resection or liposuction is the most effective treatment, despite frequent recurrence.

Keywords: Alcoholism; Lipectomy; Lipoma; Lipomatosis; Lipomatosis, multiple symmetrical

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How to cite this article: Orasmo CR, Ocanha JP, Barraviera SRC, Miot HA. Do you know this syndrome? Madelung's disease. *An Bras Dermatol*. 2014;89(3):525-6.