## Adult-Onset Asymmetrical Lipomatosis

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## PRACTICE POINTS

- Acquired asymmetrical lipomatosis is a rare condition that can develop at any age; it should be differentiated from existing syndromes of asymmetrical hemihyperplasia.
- Acquired asymmetrical lipomatosis is a clinical diagnosis with no laboratory changes. If the patient is clinically stable and asymptomatic, no further investigation or management is required.

## To the Editor:

An 85-year-old woman presented with extra growth of subcutaneous fat at the left anterior infradiaphragm that expanded circumferentially to the left back over the last 4 years. Two years prior to the current presentation, the left thigh became visibly thicker than the right. Diffuse subtle lipomatosis affecting the ipsilateral face, neck, arms, calf, and foot was noted at that time. Additionally, the patient had hyperlipidemia, gastroesophageal reflux disease, osteoporosis, and scoliosis, all beginning in her late 60s. She reported no alcohol or tobacco use and was taking rosuvastatin, esomeprazole, calcium, vitamin D, and glucosamine. There was no reported family history of asymmetric growth or bony deformities, and her children were healthy.

On physical examination, the lipomatosis affected the entire left side, most prominently around the abdomen, back, and thighs. The affected side was nontender and nonpruritic; there was no atrophy of the unaffected side (Figure). Maximum thigh circumference was 55.1 cm on the affected side and 52.6 cm on the unaffected side. There were no differences in power, reflex, or sensation between the 2 sides, and no hyperhidrosis or vascular malformations were present. Laboratory investigations, including complete blood cell count, complete metabolic panel, lipids, and thyroid-stimulating and sex hormone panels all were within reference range.





Asymmetrical lipomatosis. A, Anterior body asymmetry was noted with increased size on the left side. B, Body asymmetry of the back was noted along with scoliosis.

Enzi et al¹ reported 2 women who developed asymmetrical lipomatosis between the ages of 13 and 20 years. Acquired asymmetrical lipomatosis should be differentiated from the asymmetrical overgrowth diagnosed in neonates and infants.

Proteus syndrome (PS) is a progressive disease involving a combination of overgrowth in a mosaic distribution, connective tissue and epidermal nevi, ovarian cysts, parotid gland tumor, dysregulated adipose tissue, lymphovascular malformation, and certain facial phenotypes.<sup>2,3</sup> The average age of onset is 6 to 18 months, and

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half of cases present at birth.<sup>3,4</sup> Hemihyperplasia-multiple lipomatosis syndrome (HHML) describes a mild and nonprogressive variant that does not satisfy the diagnostic criteria of PS; it typically is diagnosed at birth.<sup>5</sup> One case of mild and delayed-onset PS was described in a woman who started developing signs at 15 years of age.<sup>6</sup> In comparison, asymmetrical lipomatosis and scoliosis were the only abnormal clinical signs present in our patient, and the lipomatosis developed diffusely, as opposed to the typical mosaic distribution found in PS and HHML. Scoliosis can be found in PS and HHML secondary to hemihypertrophy of vertebra or infiltrative intraspinal lipomatosis.<sup>7,8</sup> Our patient's scoliosis was diagnosed more than 10 years prior to the onset of lipomatosis, likely representing degenerative joint disease.<sup>9</sup>

Prior reported cases of asymmetrical lipomatosis did not describe treatment.1 Ultrasound-guided or conventional liposuction and lipectomy are mainstream therapies for multiple symmetrical lipomatosis, an acquired lipomatosis typically affecting alcoholics in the fourth decade of life. However, recurrence rates are high for surgical treatment of unencapsulated lipomatosis, likely due to incomplete removal of the adipose tissue. 10 Alternative treatments found in case reports, including oral salbutamol, mesotherapy using phosphatidylcholine, and fenofibrate (200 mg/d), require further study. 11-13 Our patient was not aesthetically bothered by her lipomatosis; therefore, imaging and treatment options were not pursued. In conclusion, we report a patient with acquired asymmetrical lipomatosis with onset in late adulthood, unique from the existing syndromes of asymmetrical hemihyperplasia. 1,14

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