Multiple Symmetrical Lipomatosis in a Patient on Long-term Corticosteroid Therapy

Sir,

Multiple symmetrical lipomatosis (MSL) is an uncommon disorder of unknown aetiology, characterised by large non-encapsulated lipomas distributed around the neck, shoulders and other axial regions (1).

CASE REPORT

A 56-year-old male presented with a 20-year history of diffuse lipomatous growths around the shoulders, arms, upper trunk and thighs. The fatty accumulations had been rapidly progressive for the first 4 years and gradually increased over the next 16 years. There was no family history of a similar disease. The patient was a non-alcoholic and had no known diabetes. In addition, the patient had been suffering from chronic actinic dermatitis for the last 30 years and had received oral corticosteroids in doses up to 40 mg of prednisolone equivalent daily.

The patient was normotensive. Cutaneous examination revealed diffuse, non-tender, lipomatous growths restricted to the shoulders, upper chest, arms, trunk and thighs (Figs. 1, 2). The face and distal part of extremities were conspicuously spared. Side-effects of corticosteroid therapy in the form of skin atrophy with striae were present on the lower trunk and calf area. The patient, however, did not have "moon-faces" or "buffalo-hump". There was no clinical evidence of superior venacaval obstruction, respiratory complaints or peripheral neuropathy.

Erythematous scaly papules and plaques were present on the face and extensors of the forearms when the patient was first seen in the outpatient department. These subsided within 2 weeks of hospitalisation with photoprotection and topical application of betamethasone valerate (0.1%) ointment. Oral corticosteroids were gradually tapered and stopped over a period of 4 weeks.

On examination, the patient was found to be suffering from diabetes mellitus. Skin biopsy from one of the growths revealed a non-encapsulated lipoma. Electrophysiological study of the nerves was suggestive of sensorimotor neuropathy involving both upper and lower limbs. Routine haemogram, liver and kidney function tests were within normal limits and so were his serum cortisol and uric acid levels. A skigram of the chest and ultrasonographic study of the abdomen revealed no abnormality.

DISCUSSION

Two patterns of distribution of lipomas have been described in MSL (2). In the type 1 variant lipomatous deposits are found primarily in the nape of the neck, supraclavicular and deltoid region, while in the type II variant lipomas are not localised to the neck but extend down over the trunk and proximal part of extremities, whereas the lower part of the trunk and lower extremities are conspicuously spared (2). Mediastinal extension of lipomas with obstructive symptoms due to pressure on trachea and superior vena cava have been described in the type I pattern (3). The disorder is frequently associated with alcoholic habit, peripheral neuropathy and deranged liver functions (1). Rarely association with gout, hypertension, obesity, diabetes and various neurological symptoms has been reported (4, 5). Certain metabolic abnormalities in the form of hyperuricaemia, hypertriglyceridaemia and hyper-insulinism may be found (2, 4). However, there is little convincing evidence that these associations are other than due to chance.

Our patient had a clinical presentation consistent with type II MSL. On examination, the patient was found to have diabetes mellitus and peripheral neuropathy, commonly associated with MSL. However, alcoholic habit frequently reported

Fig. 1. Patient having lipomatous deposits involving shoulders, arms and trunk.

Fig. 2. Lipomatous deposits on the trunk.
in this disorder was not present in our patient. Serum cholesterol and uric acid levels were normal.

Our patient also had steroid-induced striae and atrophy of the skin. However, this was unrelated to the characteristic presentation of MSL, where the lipomatous growths were confined to the shoulders, upper part of trunk and the proximal extremities. There was conspicuous sparing of the face, involvement of which is universally seen in patients with Cushing's syndrome. The association of chronic actinic dermatitis and MSL in our patient is probably inconsequential, like many other associations reported in the literature.

REFERENCES

Accepted December 4, 1995.
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Healing Rate of Skin Ulcers

Sir,

Interferometry for measuring the surface area and volume of ulcerous skin lesions, as described by Altmeyer et al. (1), may evolve into a useful tool in quantifying healing, such as before and after application of trophic factors. A working hypothesis is needed to place observations on healing rates into a conceptual framework. There are at least 2 problems: 1) healing may not be uniform over the full extent of the lesion, and 2) exquisite accuracy in repeat measurements may be required to distinguish between competing descriptions of the healing process. We illustrate these two points.

A first assumption is that since nutrients are delivered across the surface of the lesion, the rate of change of volume over time should be proportional to the surface area.

\[
\frac{d (\text{volume})}{dt} = \text{surface area} 
\]

(1)

Since many ulcerous lesions can be approximated as a depression corresponding to a hemisphere, we can utilize values for the volume of a hemisphere and its surface area. Substituting into equation (1) and integrating yields:

\[
R = kt \quad (2)
\]

The prediction is that the radius changes linearly with time. This is consistent with the values shown below Fig. 5 in the report of Altmeyer et al. on the depth of the lesion and is shown in our Fig. 1.

Fig. 1. The change in radius (depth) of an ulcerous lesion versus time, using values given below Fig. 5 of Altmeyer et al.

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Fig. 2. The change in volume of the ulcerous lesion versus time.