

Treatment of Acanthosis nigricans with Etretinate (Tigason®) in a Patient with Lawrence–Seip Syndrome (Generalized Lipodystrophy)

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The major symptoms of Lawrence–Seip syndrome or generalized lipodystrophy consist of muscle hypertrophy, loss of subcutaneous fat, hyperlipaemia, diabetes mellitus and acanthosis nigricans. We have successfully treated acanthosis nigricans in a patient with Lawrence–Seip syndrome. *Key words:* Acanthosis nigricans; Etretinate. (Received September 6, 1985.)

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In 1946 Lawrence (1), in 1954 Berardinelli (2) and in 1959 Seip (3) described practically analogous syndromes mostly called Lawrence–Seip syndrome or generalized lipodystrophy. Lawrence's original cases were adults, whereas the others were children, and in 1963 Seip & Trygstad (4) divided these cases of generalized lipodystrophy into a congenital and an acquired form. Inheritance is probably recessive and the patients are supposed to be homozygous, whereas heterozygous subjects manifest hyperlipaemia only.

CASE REPORT

Our patient is a 34-year-old woman. Both parents had hyperlipaemia: the father Fredrickson-type IV (and coronary disease), the mother type II. Her sister has hyperlipaemia and a similar "android look" (see below).

As a child she often complained of abdominal pain. From 1970 she developed eruptive xanthomathosis and laboratory investigations showed hypertriglyceridaemia and hypercholesterolemia (Fredrickson-type V). Her xanthomas disappeared gradually. In her twenties a hypertension was found and she is now treated with prazosin (Peripress®) and atenolol (Tenormin®).

For many years she had a "masculine look" with vigorous muscles and a reduction in the subcutaneous fat in the lower extremities but not elsewhere on the body. During the last ten years she noticed hypertrichosis in the face, arms, legs and abdomen and at the same time she developed pigmented skin eruptions in the axillae, lower back, upper abdomen and upper thighs which clinically and histologically represented acanthosis nigricans. She also had a general dryness of her skin. During pregnancy in 1981, diabetes mellitus was discovered. Her disease, which is insulin responsive, was treated with insulin during pregnancy and later with diet only. She had suffered from gallstones and a cholecystectomy was performed in 1982. Hepatomegaly was also observed and confirmed by liver scanning, showing probable fat degeneration. In 1984 she was hospitalized due to polyneuropathy with hyperaesthetic complaints in both legs and right hand, interpreted as of diabetic origin. All her hormonal analyses were normal. Her major symptoms are summarized in Table 1.

She was depressed because of her acanthosis nigricans for cosmetic reasons. We therefore started treatment with etretinate (Tigason®): 75 mg daily and after four weeks all her exanthema had disappeared. She has now used 50 mg etretinate for three months without relapse.

DISCUSSION

Our patient has the major characteristic traits of Lawrence–Seip syndrome. She has a partial lipodystrophy and an insulin-responsive diabetes.

Interestingly her acanthosis nigricans has been successfully treated with etretinate. It is well known that etretinate increases the concentration of triglyceride and cholesterol in

Table I. *Generalized lipodystrophy*

Symptoms	Congenital form (Seip)	Present case
Onset	Congenital	Acquired
Muscle hypertrophy	+	+
Loss of subcutaneous fat	+	+
Hyperlipaemia	+	+
Hepatomegaly	+	+
Hypertrichosis	+	+
Diabetes mellitus	+	+
	(Insulin resistant)	(Insulin responsive)
Acanthosis nigricans	+ ^a	+
Corneal opacities	+	—
Acromegaly	+	—
Dry skin	+	+

^a Described as "brownish pigmentation".

whole serum (5). Our patient has hypertriglyceridaemia and hypercholesterolemia but treatment with etretinate has not showed any further increase in her lipid levels.

In 1983 Baker & Barth (6) reported no effect of etretinate in acanthosis nigricans in a patient with adenocarcinoma of the breast. Two reports have been published concerning isotretinoin therapy of acanthosis nigricans (7, 8) but to our knowledge no other report has been published using etretinate in acanthosis nigricans.

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