

***Lipoatrophia semicircularis:* An Electromagnetic Hypothesis**

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DOI: 10.1081/JBC-120024627

Publication Frequency: 4 issues per year

Published in: [Electromagnetic Biology and Medicine](#), Volume [22](#), Issue [2 & 3](#) December 2003, pages 183 - 193

Subjects: [Cell Biology](#); [Molecular Biology](#);

Formats available: HTML (English) : PDF (English)

Abstract

The medical literature describes *Lipoatrophia semicircularis* (L.s.) as a rare, idiopathic condition characterized by semicircular impressions of the skin, at the front and sides of both thighs. A few years ago, L.s. was diagnosed in hundreds of people, mainly women, among the administrative personnel of two large companies in Belgium.

Afterwards, other cases were reported to us in numerous other companies, also in other countries including the Netherlands, France, the United Kingdom, Germany, and Italy.

L.s. is thus not as uncommon as previously thought and apparently seems to become an important job-related illness. We investigated the occurrence and cause of *Lipoatrophia semicircularis* by registering all recently known cases and paying particular attention to the working conditions of the persons with L.s. Following the elaboration of a working hypothesis, a number of measures were taken inside offices in an attempt to prevent new cases and/or obtain remissions. Some measurements were also performed with regard to the electromagnetic environment of the workplaces. *Lipoatrophia semicircularis* occurs preferentially in administrative female personnel working in new or renovated office buildings. All afflicted persons work with computers or are at least working in the proximity of electrical devices. It soon became evident that this electric environment plays a major role in the occurrence of L.s., although other factors (e.g., inadequate sitting posture and dry ambient air) may further facilitate L.s.

According to our observations, L.s. finds its origin in the electromagnetic environment of work places. It apparently occurs as a result of galvanic coupling between charged materials and the body.

Keywords: *Lipoatrophia semicircularis*; Workplace; Electrostatic charging/discharging; Adipocytes