



Figure 2 Macule with the same features and location in the second patient.

hyperpigmented macule with ill-defined borders located on the anterior aspect of the left thigh (Fig. 1). There was clinical suspicion of erythema *ab igne*; a medical history taken in order to identify the heat source suggested the use of a laptop computer as the most likely cause.

The second patient was a 20-year-old woman with a 3-month history of a reticulated hyperpigmented macule with poorly defined borders located on the anterior aspect of the left thigh, apparently unrelated to any exogenous cause (Fig. 2). Her medical history included a sedentary lifestyle, smoking, and the use of oral contraceptives. The lesion was initially thought to be livedo racemosa. Additional tests were ordered including a complete blood count, blood biochemistry, and basic coagulation profile. The results were within the normal reference range. Hepatitis serology, cryoglobulin test, and antinuclear antibody, extractable nuclear antigen antibodies, antineutrophil cytoplasmic antibodies, and antiphospholipid panels were negative. Skin biopsy only revealed a nonspecific perivascular lymphocytic inflammatory infiltrate. Following the tests, the patient was again questioned about the use of heat-emitting devices, and she replied that she used a laptop computer on her thighs for several hours a day. This suggested a diagnosis of erythema *ab igne* caused by placing the laptop in close proximity to the skin.

The first case of erythema *ab igne* induced by a laptop computer was described in 2004. Since then, 13 cases have been reported, all having the same clinical characteristics.^{2,3} It most often affects young men and women, is located on the anterior aspect of the thigh, and is almost always restricted to just one thigh, depending on the position of the computer's heat source. It appears between 2 weeks and several months following prolonged use and resolves without treatment if contact is avoided.⁴⁻⁸

Classically, when a patient presents with erythema *ab igne*, the first recommendation is to avoid close exposure of the skin to heat because, even though it may not cause a burn, this skin disorder has been associated in the long term with squamous cell carcinoma, Merkel cell carcinoma (although less often), or both. A case has recently been

described of cutaneous marginal zone B-cell lymphoma.⁹ However, if heat therapy has been applied for pain relief, the second recommendation is to ascertain the underlying cause. In addition, motivated by these new patterns of erythema *ab igne*, recent studies have shown that supporting laptop computers on the thighs raises scrotal temperature by up to 2.8 °C. This increase in temperature is produced by posture-related effects and exposure to the heat dissipated by the laptop computer. It has also been shown that an increase of 1 °C alone may have a negative impact on spermatogenesis, possibly leading to sterility if the transient increase in scrotal temperature is repeated over a prolonged period.¹⁰

Thus, since the use of laptops is increasingly common among young people, we must add the risk of male infertility as a possible complication to the list of those already known. In fact, some authors recommend that manufacturers should warn of the risk of premalignant skin lesions⁵ due to placing laptop computers in contact with the skin and of sterility in men if they are positioned close to the genital area.⁶

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