

Mucosal Hyperpigmentation due to Oxabolone

Sir,

A 27-year-old woman came to consultation for facial acne and hyperpigmented macules on the oral mucosa. Nearly 9 months before, she had been prescribed oxabolone cypionate for anxiety and depression, which had caused organic wasting and had led to a suicide attempt. Hyperpigmentation had appeared a few months after the onset of this therapy, while acne, which had preceded it, deteriorated. In addition, the patient complained of hyperpolymenorrhoea alternating with oligomenorrhoea. There was no familial history of oral lentiginosis. She denied taking any other drug.

On examination, light brown macules were seen on the mucosa of her lips and cheeks. On the face there were comedones and papulo-pustules with some scars.

Laboratory tests showed a mild anaemia. There was no radiographic evidence of intestinal polyposis, and ultrasonography excluded any gross alteration of adrenal glands and ovaries.

A biopsy of a macule showed only an increased number of melanocytes in the basal layer of the epidermis.

The patient's endocrine asset was studied for 6 months. Low cortisol levels with inversion of its circadian rhythm and occasional increases of the ACTH levels were observed. There was also an inversion of the LH/FSH ratio and low 17- β -estradiol levels. Prolactin, progesteron, hydroxyprogesteron, both free and total testosterone, δ -4-androstenedione, dehydro-epiandrosterone and dehydro-epiandrosterone sulfate levels were all in the normal range. Daily sodium, potassium and 17-ketosteroid urinary excretions were also normal. A dynamic ACTH stimulation test excluded a primary adrenal insufficiency and any adrenal enzymatic deficiency as well.

Both pigmentation and endocrine irregularities slowly faded after the discontinuation of the drug.

Oxabolone cypionate (4,17- β -dihydroxyestradiol-4-en-3-one-17-(β -cyclopentylpropionate, Steranabol Depot, Farmitalia) is an anabolic steroid, characterized by a delayed activity which allows it to be given every 8–10 days. It is used in protein and bone wasting and, though forbidden, in athletic training.

It is likely that oxabolone treatment deranged the endocrine asset of our patient and worsened the acne. Unexpected, however, was her oral pigmentation. Perusal of literature reveals that a few drugs may cause hyperpigmentation of mucosae. They include adriamycin and busulfan, ACTH, antimalarian agents, heavy metals and inorganic arsenic. Androgens have been reported to cause hypermelanosis (1) and oral lesions (methyl-testosterone, testolactone (2) and oxymesterone (3). Though it has been in the market for about 30 years, oxabolone has never been reported to do so.

REFERENCES

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