

Photoclinic

Figure 1. Intense Hyperpigmentation of Gums and Perilabial Skin.



Figure 2. Hyperpigmentation of Skin and Nipple.

A 37-year-old woman was referred to the emergency department of Hospital Universitario Central de Asturias, Oviedo, Asturias, with low blood pressure and intense asthenia. She also complained of hypoxemia and progressive tanning without having been sunbathing. She had a history of abdominal pain and drowsiness that began 3 months ago, but no vomiting was associated. Vital signs were: blood pressure: 85/43 mm Hg, pulse rate: 97/min, respiratory rate: 18/min, axillary temperature: 36.5°C. On physical examination, remarkable hyperpigmentation was observed in gums,

perilabial skin, knuckles and nipples.

Laboratory test results: WBC: 10300/mm³, Hb: 10.5 g/dL, HCT: 32.9, MCV: 75.8, PLT: 27000/mm³, total serum protein: 5.6 g/dL, serum album: 4.1 g/dL, total bilirubin: 0.7 sodium 123 mEq/L, potassium 5.6 mEq/L.

**What is your diagnosis?
See the next page for your diagnosis.**

Published Online November 1, 2017

Jessica Ares Blanco^{1*}, Lorena Suárez Gutiérrez¹, María Galiana Rodríguez Caballero¹

Authors' affiliation: ¹Department of Endocrinology and Nutrition, Faculty of Medicine, Hospital Universitario Central de Asturias (Oviedo), Oviedo University, Spain.

*Corresponding Author: Jessica Ares Blanco, Tel: +0034652157275, Email: jessiaresb@gmail.com

Cite this article as: Ares Blanco J, Suárez Gutiérrez L, Rodríguez Caballero MG. Photoclinic. Arch Iran Med. 2017;20(11):716-717.

■ Photoclinic Diagnosis

Addison's Disease: Medical Pictures of Skin and Gums Hyperpigmentation

Intense asthenia associated with hyponatremia and hyperkalemia made us suspect the disease the patient had; further studies showed Cortisol 1.9 ug/dL and ACTH 1259 ug/mL, clearly compatible with primary adrenal insufficiency (PAI).¹

The diagnosis of PAI must be suspected and sought in every patient who presents with diffuse progressive cutaneous hyperpigmentation.² PAI is a rare endocrine or hormonal disorder that affects about 1 in 100 000 people. It occurs in all age groups and afflicts men and women equally. The disease is characterized by weight loss, muscle weakness, fatigue, low blood pressure, and sometimes darkening of the skin in both exposed and non-exposed parts of the body.³

In developed countries, 80%–90% of the cases of PAI are caused by autoimmune adrenal disease, which can be isolated to the adrenal glands (40%) or part of polyglandular autoimmune syndrome (60%).

Autoimmune adrenal disease (Addison's disease) is marked by gradual destruction of adrenal cortex by cell-mediated immune mechanisms. In 85% of the patients, anti-21-hydroxylase antibodies are detected.⁴

Adrenal insufficiency can be life-threatening. The treatment must be initiated as soon as the diagnosis is confirmed: oral or intravenous steroids depending on the patient's condition. This is a chronic treatment and the patient must be educated by the doctor in order to know when to increase the dose of steroids: surgery procedures, physiological stress or any disease.

This patient was treated in accordance with standard ethical guidelines.

Conflict of Interest Disclosures

The authors have no conflicts of interest.

References

1. Nieman LK, Chanco Turner ML. Addison's disease. *Clin Dermatol.* 2006;24(4):276-80. doi: 10.1016/j.clindermatol.2006.04.006.
2. Munver R, Volfson IA. Adrenal insufficiency: diagnosis and management. *Curr Urol Rep.* 2006;7(1):80-5.
3. Addison's Disease National Endocrine and Metabolic Diseases Information Service. <https://www.niddk.nih.gov/health-information/endocrine-diseases/adrenal-insufficiency-addisons-disease>. Accessed October 26, 2007.
4. Patnaik MM, Deshpande AK. Diagnosis--Addison's disease secondary to tuberculosis of the adrenal glands. *Clin Med Res.* 2008;6(1):29. doi: 10.3121/cmr.2007.754a.