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Case report

# Skin necrosis in a patient with temporal arteritis

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#### ABSTRACT

We present the case of a 91 years old patient diagnosed through biopsy with temporal arteritis who, in addition, had scalp necrosis. We briefly review the literature for published cases.

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# Necrosis cutánea en paciente con arteritis temporal

RESUMEN

Presentamos el caso de un paciente de 91 años diagnosticado por biopsia de arteritis temporal que presentaba además necrosis del cuero cabelludo. Revisamos brevemente la bibliografía y los casos publicados. © 2010 Elsevier España, S.L. Todos los derechos reservados.

This case involves a 91-year-old male admitted with a headache and lesions to his scalp. We should point out the following in his medical history: high blood pressure, dyslipidemia, severe chronic obstructive pulmonary disease of a chronic bronchitis type, requiring oxygen therapy, and chronic arterial insufficiency of the lower limbs. His normal treatment consisted mainly of antiplatelet agents, diuretics and bronchodilators and inhaled glucocorticoids.

He went to the Emergency Department for the first time because he had had symptoms for more than a month; these were headaches that involved the whole head but were more severe on the right side and scalp hypersensitivity, which did not respond to normal analgesia such as paracetamol. He also had a lesion on the right fronto-parietal region (red spot without a crust, non-exudative). Upon a second examination carried out 10 days later, new lesions on the scalp were seen, as larger size scabs, which is why it was listed as a herpes Zoster and he was referred to the Dermatology department. Here the patient reported a constant pain, with asthenia and loss of

approximately 8 kg in weight over the last two months, which is why he was admitted for study and treatment for suspected temporal arteritis. He denied any symptoms of polymyalgia, jaw claudication or visual disturbances.

Upon physical examination, a scabby plaque of 7 cm  $\times$  3 cm, which was well defined and followed a linear path, on the right temporoparietal region came to our attention. There were other scabby lesions in the right frontal region; the biggest was about 1.5 cm, with adjacent *Livedo reticularis*. He also showed significant induration on palpation of the temporal arteries.

With regards to the additional tests, the haemogram showed a normocytic and hypochromic anaemia with 11.5 g/dl Hb, ESR of 101 and CRP of 6.5 mg/dl.

An emergency biopsy of the temporal artery was carried out that showed the following results: partial obstruction of the arterial lumen due to a thickening of the vascular wall because of a dense lymphohistiocytic infiltrate with giant cells that engulfed the elastic ones.

Having been given a temporal arteritis diagnosis and having been assessed by Ophthalmology, who ruled ophthalmic complications, treatment was started with prednisone at a dose of 1 mg / kg, with which the patient experienced a fast improvement not only clinically with the

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Figure. Skin necrosis in a patient with temporal arteritis.

headache but also analytically, with a decrease in the inflammatory markers. He was discharged from hospital and subsequently introduced to immunosuppressors to be able to lower the doses of glucocorticoids.

### **Comments**

Temporal arteritis is a vasculitis that produces inflammation in medium to large arteries and that generally affects people over 50 years old, with a peak in incidence rate for females of 70 years old. Its main symptoms are headaches, often with scalp hypersensitivity, amaurosis, jaw claudication and symptoms of polymyalgia rheumatica, with pain and proximal muscle weakness on all four limbs. Scalp necrosis (Figure) is an unusual complication in temporal arteritis, related to its activity. There have been about 30 cases described in literature up till now, since Cooke et al1 described the first one in 1946. Often the differential diagnosis is difficult, as it can be mistaken for other skin lesions that affect the scalp such as pustular dermatitis, pyoderma gangrenosum and Herpes Zoster. It is also associated with a high mortality and morbidity in patients with temporal arteritis, especially if it is not diagnosed early.<sup>2,3</sup> The lesion usually improves with early treatment with high doses of glucocorticoids and antibiotics if there is a superinfection,4 but sometimes surgical debridement of the scab may be necessary.5 Other skin lesions that can occur in temporal arteritis are oedema, erythema, alopecia, and even necrosis of the tongue. 6,7

All patients had received detailed information on the study and provided their written informed consent prior to their inclusion.

# References

- Cooke WT, Cloake PC, Govan AD, Colbeck JC. Temporal arteritis: a generalised vascular disease. Q J Med. 1946;15:47-75.
- Mucke T, Westing MR, Holzle F, Wolff KD. Uncommon presentation of GCA: report of two cases with scalp necrosis. Neurol India. 2009;57:61-2.
- Weyand CM, Goronzy JJ. Medium-and large-vessel vasculitis. N Engl J Med. 2003;349:160-9.
- 4. Nordborg E, Nordborg C. Giant cell arteritis: Epidemiological clues to its pathogenesis and an update on its treatment. Rheumatology (Oxford). 2003;42:413-21.
- Currey J. Scalp necrosis in giant cell arteritis and review of the literature. Br J Rheumatol. 1997;36:814-6.
- Biebl MO, Hugl B, Posch L, Tzankov A, Weber F, Perkmann R, et-al. Subtotal tongue necrosis in delayed diagnosed giant-cell arteritis: A case report. Am J Otolaryngol. 2004:25:438-41.
- Landis SJ, Selinger S, Flett N. Scalp necrosis and GCA: case report ans issues in wound management. Int Wound J. 2005;2:358-61