ing in the suspected patch and histopathology revealed infiltration along the neurovascular bundles. With these findings, we were able to diagnose Hansen's disease and treat the patient.

The sweat response using different stimulating agents have been described by several authors, such as epinephrine injections by Wade (1940), pilocarpine by Muir (1938), Mecholyl by Arnold (1944) and acetylcholine by Parekh, et al. (1966), Sehgal (1976) and Matur, et al. (1971) (1). These tests are invasive, cumbersome and, therefore, not routinely used. The degree of sweat function impairment cannot be graded by the above tests. The modified procedure herein described is simple, can be undertaken at any place and the loss of sweat function can be graded, hence, this test may be useful in uncooperative patients, children and in lesions over the face, where it is difficult to elicit sensory impairment. We have undertaken this study at the field level to find out the utility value of this test in detecting and confirming the diagnosis of Hansen's disease.

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## REFERENCES

- BOYLE, A. and RAMU, G. Assessment of cutaneous autonomic nerve functions in leprosy. Lepr. India 54 (1982) 518–524.
- RAMU, G. Sensory Testing at Field Level. In: *The Peripheral Nerve in Leprosy and Other Neuropathies*.
   1st edn. Antia, N. H. and Shetty, V. P., eds. Oxford: Oxford University Press, 1997, pp. 36–44.
- RAMU, G., KARTIKEYAN, S., BALAKRISHNAN, S., PATIL, S. A., RAMANATHAN, V. D. and DESIKAN, K. V. Histopathological and immunological correlates of suspected leprosy lesions. Indian J. Lepr. 68 (1996) 155–159.

## Regarding Mohamed, Facial Lesions Resembling to Leprosy

TO THE EDITOR:

In a recent letter concerning patients with facial lesions mimicking leprosy, K. B. Mohamed (4) proposed a diagnosis combining gangosa and goundou syndrome in one case (no. 2). Gangosa syndrome is a destructive ulcerative rhinopharyngitis that can occur in the late stages of endemic treponematosis. In France, gangosa syndrome was observed at the end of the 19th century in association with syphilis (1). The case presented in the letter is consistent with this condition. However, the diagnosis of goundou syndrome seems unlikely in our opinion.

Goundou syndrome is a clinical form of recent yaws characterized by the presence of either a tumorous swelling involving the paranasal bones that is usually symmetrical or of diffuse hypertrophy of the whole nasopalatine region, therefore, the name given to the condition in West Africa, i.e., N'goundou meaning "big nose" (Fig. 1 and 2). This treponeme-related osteoperiostitis begins in the early phase of primary infection (usually during childhood) and slowly grows, ultimately causing obstruction of the visual field and, in diffuse forms, of the respiratory and digestive tracts. Goundou syndrome is not associated with bone necrosis



Fig. 1. Paranasal Goundou, Cote d'Ivoire, 1916 (Coll. IMTSSA, Le Pharo, Marseille, France).



Fig. 2. Diffuse Goundou, Cote d'Ivoire, 1917 (Coll. IMTSSA, Le Pharo, Marseille, France).

and, to our knowledge, none of the 137 cases reported in the literature notably by P. Botreau-Roussel (2.3) was associated with gangosa

Destruction of the nasal region in Dr. Mohamed's patient probably led to skin folding or may have been accompanied by a mild periosteal reaction, but there are no grounds for diagnosis of goundou syndrome.

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## REFERENCES

- ZUCKERKANDL, E. Anatomie normale et pathologique des fosses nasales. ed Paris: Masson, 1895.
- Botreau-Roussel, P. Ostéites pianiques "Goundou". ed Paris: Masson, 1925.
- BOTREAU-ROUSSEL, P. Clinique chirurgicale des pays chauds. ed Paris: Masson, 1938.
- MOHAMED, K. B. Facial lesions resembling leprosy. Int. J. Lepr. 69 (2001) 35–37.

## Study of Pattern of Ocular Changes in Different Types of Leprosy Patients

TO THE EDITOR:

Involvement of eyes is one of the most serious complications that can occur in leprosy, and, if neglected or left untreated, could eventually cause blindness. In a recent multi-center study between 4% to 7% of the leprosy patients were found to be blind and between 6% and 50% had severe visual impairment ( $^{1,2}$ ).

The present study was carried out on a random sample of 100 leprosy patients