Touraine-Solente-Gole syndrome: The elephant skin disease



FIG 1. Changes in the skin and joints



FIG 2. Changes in the eyes

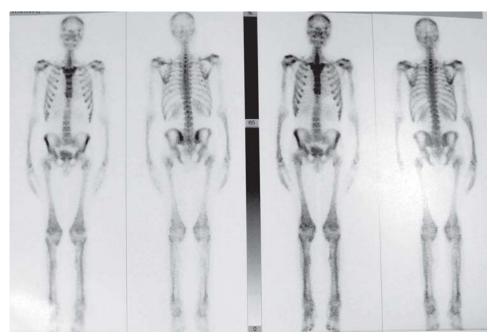


FIG 3. Technetium-99m bone scan showing symmetrical diffuse uptake in the long bones

Pachydermoperiostosis (Touraine–Solente–Gole syndrome) is a rare genetic disease, with multiple systemic manifestations involving hypertrophic skin changes, digital clubbing and periostosis.¹ A 23-year-old man presented with a history of thickening and drooping of his eyelids for the past 3 years. He complained of repeated swelling of his hip, knee and wrist joints. On examination, he had thickened, wrinkled facial skin with furrowing. There were deepened nasolabial folds and seborrheic hyperplasia (Fig. 1a). There was evidence of clubbing in the fingers (Fig. 1b) and toes (Fig. 1c) along with hyperhidrosis of the palm and sole. The knee joints also appeared swollen (Fig. 1d). There was diffuse thickening of the tarsus and lid margin with two small chalazions near the right lower lid margin with moderate ptosis in both eyes (Fig. 2a). Congestion and palpebral conjunctival hyperplasia were noted bilaterally (Fig. 2b). Technetium-99m bone scan showed symmetrical diffusely increased uptake in long bones of the appendicular skeleton and the periarticular region (Fig. 3). A diagnosis of pachydermoperiostosis was made. He was managed with intralesional injection of triamcinolone acetonide for chalazion, and topical antihistamine and lubricants for ocular irritation.

The disease has an estimated prevalence of 0.16% with onset in adolescence.^{2,3} The man:woman ratio is 7:1, with men being severely affected.⁴ It has autosomal dominant inheritance.⁵ Three clinical forms are described: complete (periostosis and pachydermia), incomplete (periostosis without pachydermia), and forme fruste (pachydermia with minimal periosteal

change). While the typical course of the disease is self-limiting, non-steroidal anti-inflammatory drugs may be given to manage pain.⁶ To control the cutaneous manifestations, steroids, isotretinoin⁷ and botulinum toxin⁸ have been tried.

Conflicts of interest. None declared

REFERENCES

- 1 Neufeld KR, Price K, Woodward JA. Massive eyelid thickening in pachydermoperiostosis with myelofibrosis. *Ophthalmic Plast Reconstr Surg* 2009;25:316–18.
- 2 Jajic I. Epidemiology of hypertrophic osteoarthropathy. Clin Exp Rheumatol 1992;10 Suppl 7:13.
- 3 Reginato AJ, Schiapachasse V, Guerrero R. Familial idiopathic hypertrophic osteoarthropathy and cranial suture defects in children. *Skeletal Radiol* 1982;8:105–9.
- 4 Rajan TM, Sreekumar NC, Sarita S, Thushara KR. Touraine Solente Gole syndrome: The elephant skin disease. *Indian J Plast Surg* 2013;46: 577–80.
- Castori M, Sinibaldi L, Mingarelli R, Lachman RS, Rimoin DL, Dallapiccola B. Pachydermoperiostosis: An update. *Clin Genet* 2005;68:477-86.
 Martinez-Lavin M. Miscellaneous non-inflammatory musculoskeletal conditions. Pachydermoperiostosis. *Best Pract Res Clin Rheumatol* 2011:25:727-34.
- 7 Beauregard S. Cutis verticis gyrata et pachydermopériostose. Plusieurs cas dans une même famille. Résultats préliminaires du traitement de la pachydermia avec l'isotrétinoïne [Cutis verticis gyrata and pachydermoperiostosis. Several cases in a same family. Initial results of the treatment of pachyderma with isotretinoin]. Ann Dermatol Venereol 1994;121:134–7.
- 8 Ghosn S, Uthman I, Dahdah M, Kibbi AG, Rubeiz N. Treatment of pachydermoperiostosis pachydermia with botulinum toxin type A. J Am Acad Dermatol 2010;63:1036-41.

SAHIL AGRAWAL, NEELIMA BALAKRISHNAN, SUJEETH MODABOYINA, RAJESWARI THANGAVEL, DEEPSEKHAR DAS Dr Rajendra Prasad Centre for Ophthalmic Sciences, All India Institute of Medical Sciences, New Delhi 110029, India doc.deep.das@gmail.com

> SALONI GUPTA Northern Railway Central Hospital, New Delhi 110055, India

[To cite: Agrawal S, Balakrishnan N, Modaboyina S, Thangavel R, Das D, Gupta S. Touraine–Solente–Gole syndrome: The elephant skin disease. *Natl Med J India* 2023;36:56–7. DOI: 10.25259/NMJI_629_20]