

partial vision loss after an attempted correction of glabellar frown lines with bovine collagen.<sup>6</sup> This serious complication was also seen after the use of autologous fat as a filler. Egado *et al.*<sup>7</sup> reported the third case of unilateral blindness after fat injection into the glabellar area. Arterial embolization is not only a possible side-effect of hyaluronic acid injections but of all filler substances used in the glabellar area.

In our patient the dorsal nasal artery was affected despite aspiration before injection. It is possible that the injection pressure led to a perforation of the vascular wall. To minimize this risk, dermal injections for augmentation of the glabellar region should be given superficially and medially, and aspiration is recommended. Patients should be informed of the possibility of this rare complication.

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## References

- Olenius M. The first clinical study using a new biodegradable implant for the treatment of lips, wrinkles, and folds. *Aesthetic Plast Surg* 1998; **22**: 97–101.
- Duranti F, Salti G, Bovani B *et al.* Injectable hyaluronic acid gel for soft tissue augmentation. A clinical and histological study. *Dermatol Surg* 1998; **24**: 1317–25.
- Lupton JR, Alster TS. Cutaneous hypersensitivity reaction to injectable hyaluronic acid gel. *Dermatol Surg* 2000; **26**: 135–7.
- Shafir R, Amir A, Gur E. Long-term complications of facial injections with Restylane (injectable hyaluronic acid). *Plast Reconstr Surg* 2000; **106**: 1215–16.
- Hanke CW, Higley HR, Jolivet DM *et al.* Abscess formation and local necrosis after treatment with Zyderm or Zyplast collagen implant. *J Am Acad Dermatol* 1991; **25**: 319–26.
- Stegman SJ, Chu S, Armstrong RC. Adverse reactions to bovine collagen implant: clinical and histological features. *J Dermatol Surg Oncol* 1988; **14**: 39–48.
- Egado JA, Arroyo R, Marcos A, Jimenez-Alfaro I. Middle cerebral artery embolism and unilateral visual loss after autologous fat injection into the glabellar area. *Stroke* 1993; **24**: 615–16.

## Epidemic occupational dermatitis caused by *Pronematus davisi* (Acari: Tydeidae)

SIR, We report an unusual occupational dermatitis caused by a biotic agent in eight woodworkers employed in craft carpentry near Perugia, central Italy. All subjects, aged between 19 and 53 years, developed small, light red papules, some excoriated and covered with haemorrhagic crusts, and some with a central tense vesicle, involving the whole skin surface but particularly the trunk and upper limbs. The

lesions were itchy, recurrent, work-related and sometimes left a depigmented or hyperpigmented spot. In some affected individuals the severity of the dermatitis necessitated absence from work.

There were no evident causes, but the dermatitis arose 1 week after the cutting of wood imported from North America, probably Canada. Occupational entomodermatitis was suspected.

To verify this, the sawdust collected in the carpentry workshop was examined by direct stereoscopic microscopy.<sup>1</sup> After repeated examination, several adult mites with a very small idiosoma (approximately 250 µm) were observed with the following distinctive morphological features: tarsus I without claws or empodium, palpal distal segment elongated, L5 hysterosomal setae missing, tarsus I shorter than tibia so that pair I, with the distal and slender sensory organ called the solenidion, appears truncated. On the basis of these morphological features and the remarkable mobility due to the III and IV pairs of claws, *Pronematus davisi*, a Prostigmata mite belonging to the order Actinedida, suborder Eupodina, superfamily Tydeoidea, family Tydeidae, was identified.<sup>2</sup> However,

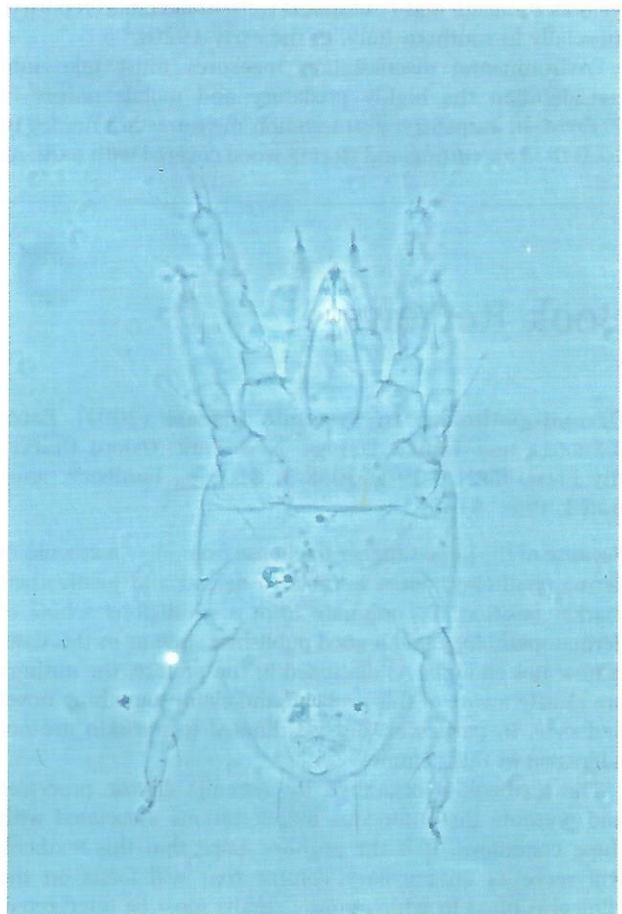


Figure 1. Larva of *Pronematus davisi* (stereomicroscopic observation in contrast phase; original magnification  $\times 40$ ).

the recognition and isolation of the mite through direct examination of environmental dust were quite difficult because the dome-shaped appearance of the dorsal surface of the idiosoma made it difficult to distinguish by stereomicroscopy from vegetable fragments or other arthropods. Repeated examination of the dust showed a large number of larvae of this species (Fig. 1). This stage demonstrates the reproductive activity of the mites in the sawdust. The hatching of many eggs and subsequent release of numerous larvae, which are biologically more aggressive than adult mites, probably caused the cutaneous signs and symptoms in the woodworkers.

The Tydeidae family includes species of omnivores, fungivores, phytophages and predators.<sup>3</sup> They have a buccal apparatus with movable styletiform chelicerae, which are able to perforate vegetables and other organic materials. They are known to feed on insect eggs and plants, and it is thought that they feed on other mites or insects found in stored food products.

Data on the geographical distribution of *P. davisii* are poor. This mite has a world-wide distribution but is more widespread in North America, where it usually lives under bark.<sup>4</sup> *P. davisii* has been never reported in Italy, but similar species such as *P. banatii* and *P. ubiquitous* were isolated and reported, especially in southern Italy, in the early 1920s.<sup>5</sup>

Environmental disinfestation measures must take into consideration the highly predatory and mobile nature of *P. davisii*. In carpentry, disinfestation measures are needed in areas used for cutting and storing wood covered with bark. As

*P. davisii* does not have clarified areas or an idiosomal shield, in our case we eradicated the infestation by vaporizing mild pyrethroids. The affected individuals were treated with soft emollients, and their occupational dermatitis resolved in about 2 weeks.

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## References

- Ottoboni F, Piu G, eds. *Gli Acari Allergenici: Guida Al Loro Riconoscimento*. Milan: UTET Periodici Scientifici, 1990; 3-15.
- Andre HM. A generic revision of the family Tydeidae (Acari: Actinedida). IV. Generic descriptions, keys and conclusions. *Ann Soc R Belg* 1979; **116**: 103-68.
- Baker EW, ed. *Advances in Acarology*. Ithaca, NY: Cornell University Press, 1965; 95-133.
- Marshall VG. Tydeid mites (Acarina: Prostigmata) from Canada. I. New and redescribed species of *Lorryia*. *Ann Soc Entomol* 1970; **15**: 17-52.
- Bernini F, Castagnoli M, Nannelli R, eds. *Arachnida Acari: Checklist Delle Specie Della Fauna Italiana*. Bologna: Calderini, 1995; 24-38.