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PHOTO QUIZ

Answer to Photo Quiz: Oral Myiasis Caused by Larvae of the Green Bottle Fly *Lucilia* sp.

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The collected mobile organisms sent to the laboratory were whitish, segmented, and hemicylindrical, measuring approximately 6 to10 mm in length. Use of a magnifying glass revealed a legless and conical shape typical of musciform larvae. They were identified as third-instar larvae of the calliphorid fly *Lucilia* sp. causing facultative myiasis. The tegument was ornamented with cuticular spines arranged in belts (see Fig. 1B in the photo quiz presentation). Observation of the posterior twelfth segment showed posterior spiracles with three slits in a complete peritreme without projections (Fig. 1B, black arrow). Furthermore, observation of the cephalic end revealed the presence of anterior spiracles terminating in short finger-like rays (Fig. 1C), together with the absence of an accessory oral sclerite (Fig. 1D) (1). The collected mobile organisms sent to the laboratory were whitish, segmented, and hemicylindrical, measuring approximately 6 to10 mm in length.

Myiasis-causing flies are known for their forensic importance and used in maggot therapy for cleaning out necrotic tissue and debridement. Two forms of myiasis are usually described: obligatory myiasis, in which maggots feed on live host tissue, and facultative myiasis, resulting from eggs hatching in wound or necrotic tissue. Facultative myiasis has been reported in comatose and disabled patients with descriptions of nasal, nasopharyngeal, tracheal, ocular, urogenital, and intestinal localizations as well as maggots reported in open wounds or diabetic non-healing ulcers (2–4). It is also encountered in patients with poor socio-economic background or poor hygiene (5). Because myiasis-causing flies lay eggs in cavities where they hatch quickly, maggot feeding on necrotic tissue may lead to tissue damage and bacterial superinfections (2). Our case reports on nosocomial facultative myiasis, highlighting the importance of medical attention in ICU patients requiring considerable support over the course of their hospitalisation. Since no lesion was observed in the oral cavity of the patient, there was no risk of damage to healthy tissue, as facultative myiasis maggots only feed on dead tissue.

This case underlines the importance of clinical attention in patients under assisted mechanical ventilation, particularly in cases of pharyngeal packing. Regular oral examination and mouthwashes are of utmost importance to drain mucus and secretions since larvae most likely feed on the biofilm of the oral cavity.

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