A 52-year-old man presented with a painful ulceration of the scalp (Fig. 1a). He had returned from Guyana the previous week. Dermoscopic examination (FotoFinder Systems GmbH, Bad Birnbach, Germany) showed an intermittent dynamic aspect changing from a sanguineous roundish ulcer (Fig. 1b) to a peculiar roundish structure characterized by a yellowish peripheral ring and a central brownish part (Fig. 1c). High-definition optical coherence tomography (HD-OCT; Skintell®; Agfa Gevaert, Antverpen, Belgium) showed a skin cavity (Fig. 2a). Reflectance confocal microscopy (RCM; Vivascope 3000®; Caliber, New York, USA, distributed in Europe by MAVIG GmbH, München, Germany) showed the roundish structure observed under dermoscopy much better (Fig. 2b) and identified an additional polycyclic intermediate reflecting symmetric structure (Fig. 2c). This article is protected by copyright. All rights reserved. KEYWORDS: Dermatobia hominis; in vivo; dermoscopy; diagnosis; entodermoscopy; myiasis and parasite; optical coherence tomography; reflectance confocal microscopy PMID:28191689 DOI:10.1111/jdv.14170