Correspondence

Dermoscopy of childhood flexural comedones: description of 4 cases

Childhood Flexural Comedones (CFC) are a new clinical entity first described in 2007 by Larralde et al., who collected 40 patients presenting with unusual occurrence of comedones on flexural areas, in particular axillae. After that observation, two further reports were published. CFC can be single or multiple, unilateral or bilateral, and usually present as double opening comedones connected by a thin layer of the epidermis that reveals the comedo content below. All the patients previously described in literature were otherwise healthy, and the only remarkable associations were molluscum contagiosum (MC) (13 cases), inflammatory acne (2 cases), comedonal acne (1 case), ovarian cysts associated with infundibular cyst of the axilla (1 case), juvenile rheumatoid arthritis (1 case), and history of neonatal milia (1 case). Moreover, familiarity was found in only four patients, whereas the remaining cases were sporadic. Etiology of CFC is still unknown. They were hypothesized to be potential precursors of hidradenitis suppurativa (HS), as patients affected by HS often present double opening comedones on flexural regions, but this association is still debated. One third of the patients reported in the first description was affected by MC, and comedones are known to potentially appear after resolution of MC, but the absence of MC lesions in the areas where CFC appeared excluded this hypothesis. Friction was also supposed to be a possible reason for the development of CFC. As a minority of cases of CFC were familial, a genetic background could be taken into account, even because of the existence of genetic conditions characterized by diffuse comedones, such as familial dyskeratotic comedones.

In the recent years, we have observed four cases of CFC (Fig. 1). They were three females and one male, and mean age at presentation was 5 years. All the lesions were detectable on the axillae and were bilateral except one patient, who had unilateral CFC. Among our patients, there were no relevant associations, excluding one patient affected by juvenile rheumatoid arthritis. Dermoscopic examination (DermLite PhotoSystem; 3Gen, San Juan Capistrano, CA, USA with immersion) of CFC showed two different patterns of presentation: cuneiform comedo (Fig. 1b–c) and multi-orifice comedo (Fig. 1e–f). To the best of our knowledge, dermoscopy of CFC has not been reported yet. Recently, a similar dermoscopic finding, namely double-ended pseudo-comedones, has been described in HS, thus supporting once again the potential link between CFC and HS. Whatever the dermoscopic findings are, CFC seem to be horizontally located in the skin, with multiple openings (when visible) connected to each other. At dermoscopy, this connection could be sometimes visible through the transparency of a subtle layer of skin.

CFC should be differentiated by acute flexural comedones of adulthood that can appear after inappropriate use of deodorants.

Figure 1 (a–d) Clinical appearance of 2 cases of CFC; (b–c) Dermoscopy showing the cuneiform comedo; (e–f) Multi-orifice comedones detected through dermoscopy
personal observation), as we have recently observed in a 41-year-old man (Fig. 2a) or, as reported in literature, after surgery for axillary hyperhidrosis and osmidrosis. Dermoscopy in this case shows diffuse follicular keratin plugs (Fig. 2b).

CFC are probably an underestimated skin condition, whose occurrence is a matter of concern among parents of the affected children. Dermatologists should be aware of the existence of this disease, whose recognition could be facilitated and supported by the use of rapid and noninvasive diagnostic technique as dermoscopy, which could permit to quickly solve the clinical doubts, when present, and reassure the parents.

Vincenzo Piccolo 1,*
Teresa Russo 1
Caroline Silva Pereira 2
Markus Danielsson Darlington 3
Giuseppe Argenziano 1

1Dermatology Unit, University of Campania Luigi Vanvitelli, Naples, Italy
2Dermatology, Hospital Sirio-Libanes, Sao Paulo, Brazil
3Department of Dermatology and Venereology, Sahlgrenska University Hospital, Institute of Clinical Sciences, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden
*E-mail: piccolo.vincenzo@gmail.com

Figure 2 (a) 41-year-old man developing acute flexural comedones of the axillary region; (b) Dermoscopy showing follicular plugs

doi: 10.1111/ijd.13894

References