Dermoscopic and Confocal Microscopic Presentation of Rare Melanoma of the Nipple

KEY-WORDS – Dermoscopy; Melanoma; Microscopy, Confocal; Nipples; Skin Neoplasms.

Melanoma may arise at unusual sites where its differential diagnosis might be challenging. In such cases, when available, non-invasive diagnostic techniques are recognized to add important clues that increase diagnostic accuracy.

An 87-year-old male presented with a 1-year history of a fast growing pigmented lesion on the left nipple and areola. A multicoloured, irregular and asymmetrical macule, 15 mm in diameter was observed (Fig. 1a-b). Dermoscopy disclosed an eccentric irregular black blotch, surrounded by peripheral streaks and few dots, and adjacent to an atypical brown network with a central regression area within (Fig. 1c). The lesion was additionally examined using reflectance confocal microscopy. Highly-refractile pleomorphic, roundish cells in a pagetoid spread along a disarranged honeycomb pattern were seen at superficial epidermal level (Fig. 1d). Surgical excision was then performed. Histopathological evaluation showed atypical melanocytes scattered as single cells throughout all epidermal layers with papillary dermis fibrosis (Fig. 1e). Melanocytes stained positively for Melan-A (Fig. 1f). A melanoma with 0.38mm in thickness and regression features was diagnosed.

Differential diagnosis of pigmented lesions of the nipple and areola includes melanocytic nevus, seborrheic keratosis, nevoid hyperkeratosis, pigmented basal cell carcinoma and pigmented Bowen’s disease. In addition, although rare, melanoma and pigmented mammary Paget’s disease (even less frequent in male patients) must be excluded.1 Especially the differential diagnosis of the later is challenging as both entities may share similar clinical, dermoscopic and histopathological features. To the best of our knowledge, we provide the first correlation between dermoscopic, confocal and histopathological features of rare melanoma of the nipple. Our case adds that RCM also reveals an overlapping presentation, because atypical pagetoid cells and disarranged honeycomb pattern are found in both.2 Therefore, histology and immunohistochemical staining remain gold standard, although dermoscopy and RCM may provide additional non-invasive clues for correct diagnosis.
Carta ao Editor

Figure 1 - (A-B) - Multicoloured, irregular and asymmetrical macule on the left nipple. (C) Dermoscopic presentation: eccentric irregular black blotch surrounded by peripheral streaks and dark-brown dots; adjacent atypical brown network with central regression is also seen (slight blue traces from dermographic marker are observed; contact, polarized light, x10). (D) Reflectance confocal microscopy at superficial epidermis revealing loss of normal lobular arrangement of the nipple, with a disarranged honeycomb pattern and pagetoid spread of multiple highly-refractile pleomorphic cells. Basic image (0.5x0.5mm) shows detail of bright and roundish cells scattered along the epidermis corresponding to malignant melanocytes. (E) Histopathological examination revealing multiple, atypical melanocytes scattered throughout the epidermis. Papillary dermis fibrosis related to regression is also observed (hematoxylin-eosin, x100). (F) Melanocytes stain positively for Melan-A, with a good correlation to confocal findings. A melanoma with 0.38 mm in thickness, non-ulcerated, and less than 1 mitosis/mm² was diagnosed.

REFERENCES

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