Case for diagnosis / Caso para diagnóstico

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DISEASE HISTORY

78 year-old female patient, Fitzpatrick's phototype II, presented a year ago with a lesion in the second right finger, with occasional bleeding. Previous medical history without any particularities. Did not use any systemic medication. Denied history of trauma, previous cutaneous alterations (such as warts or psoriasis), immunosuppression or exposure to chemicals or radiation. She had used antibiotic creams, with a partial improvement, but not resolution.

Under examination, present onicolysis and a nodular eroded lesion with hyperkeratoctic borders, in the ungueal bed of the second right finger (Figure 1). On physical examination, she was in good general shape, with no palpable axillary lymphadenopathies or any other abnormalities. Lung and affected finger radiographs with no alterations.

Histopathological examination revealed atypical squamous proliferation extending to dermis, presenting a marked adjacent lymphocytosis (Figure 2).

COMMENTS

The clinical hypotheses raised were of piogenic granuloma, epidermoid carcinoma, amelanotic melanoma and keratoacanthoma

Final diagnosis was obtained through histopathology and confirmed subungueal epidermoid carcinoma (SCC). A conservative surgical treatment was performed, with no amputation, and good evolution. Histopathological analysis revealed free margins at post-operatory, and there are no clinical signs of relapse after 10 months of follow-up

Subungueal SCC is a rare malignant tumor, of variable presentation and idle course, and that many times is mistaken for benign lesions, leading to an incorrect clinical hypothesis, delaying definitive diagnosis and making treatment more difficult.[1] This is why it its recurrently underdiagnosed, with few reports in the literature, with only three latin American articles, none of them Brazilian.

It occurs mainly in fingers,[2] in men after the fifth decade.

In the majority of instances, it presents as a circumscribed lesion, with vegetating surface, extending from the ungueal bed to lateral borders and free border of the nail. Onicodystrophy occurs as a consequence of matrix compromising; paronychia, dyschromia, ulceration, bleeding and pain may also occur.[2]

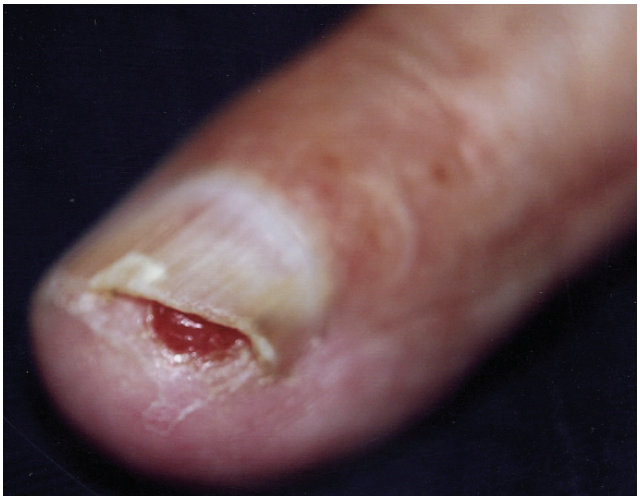

Figure 1: Nodular eroded lesion with hyperkeratoctic borders, in the ungueal bed of the second right finger with secondary onicolysis

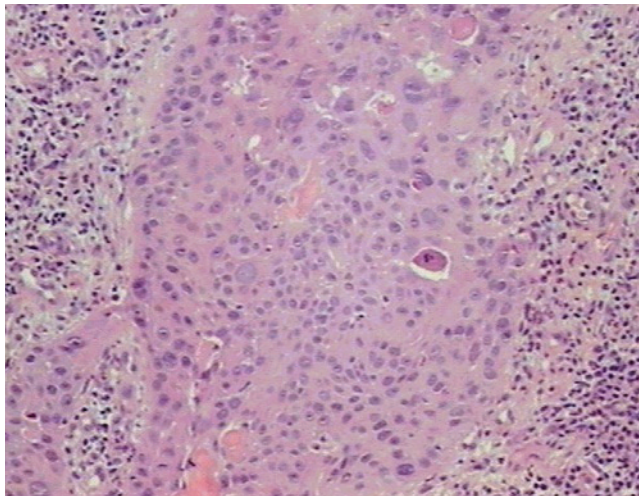

Figure 2: Atypical squamous proliferation with dyskeratosis and chronic inflammation (HE 100x)

Differential diagnosis depends on the presentation and includes chronic paronychia, piogenic granuloma, verruca vulgaris, onicomycosis, psoriasis, subungueal exostosis and melanoma.[1-3] Other diagnosis of difficult differentiation are keratoacanthoma, which may have similar clinical, histological and radiological findings, and metastatic SCCs, which are extremely rare and occur following lung and esophageal cancer.[1-3]

Subungueal SCC etiology is not known, however, there are numerous factors implicated in the pathophysiology of the disease, such as trauma, chronic infection, immunosuppression, exposure to arsenic, coaltar or radiation, genetic disorders such as congenital dyskeratosis and congenital epidermolysis bullosa.[2] Subungueal SCC has also been associated to some types of HPV (16, 26, 34, 35, 56), suggesting a probable mechanism of auto-inoculation, from the anogenital region, specially in immunosuppressed patients.[1,2]

The treatment of choice for initial lesions, with no bone affection, is Mohs' micrographical surgery.[4] In case there is radiological evidence of bone affection, phalangis distalis or finger amputation is indicated.[2,4] Other described treatments are photodynamic therapy and carbon dioxide laser for *in situ* tumors, Bowen disease-like, and radiation therapy, specially in case of non-resectable tumors.[4]

In the here described case, the option was made for conservative surgery, because there was no bone affection, and because of the difficulty in performing Mohs' surgery in Brazil. The possibility of effective and less mutilating surgical treatment heavily relies on a correct and early diagnosis of this type of tumor. For that, a high degree of suspicion and investigation of all chronic ungueal alterations which do not respond to indicated treatments is needed. ❑

REFERENCES

1. High WA, Tyring SK, Taylor RS. Rapidly enlarging growth of the proximal nail fold. Dermatol Surg. 2003; 29: 984-6.
2. Nasca MR, Innocenzi D, Micali G. Subungual squamous cell carcinoma of the toe: Report on three cases. Dermatol Surg. 2004; 30: 345-8.
3. Dobson CM, Azurdia RM, King CM. Squamous cell carcinoma arising in a psoriatic nail bed: case report with discussion of diagnostic difficulties and therapeutic options. Br J Dermatol. 2002; 147: 144-9.
4. Peterson SR, Layton EG, Jospeh AK. Squamous cell carcinoma of the nail unit with evidence of bony involvement: A multidisciplinary approach to resection and reconstruction. Dermatol Surg. 2004; 30:218-21.

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