

In contrast to the usual histopathological features of CMNs, in which the dermal component predominates, subungual and periungual CMNs are characterized mainly by junctional melanocytic proliferations. In our case there were also isolated intraepidermal melanocytes.

The differential diagnosis must include disorders of various origins, including melanocytic lesions (ungual lentigo, nevus of the nail matrix, subungual blue nevus, ungual melanoma), racial pigmentation, drug-induced pigmentation, endocrine disorders, trauma, and hemorrhage.<sup>5</sup> Histology of the nail plate is a simple and nontraumatic way to differentiate between melanic and hematic origins of the pigment deposits in the nail. In subungual CMNs, the early presence of proximal periungual pigment may be erroneously interpreted as a positive Hutchinson or pseudo-Hutchinson sign, observed respectively in acral melanomas and nail matrix nevus.<sup>6</sup> However, the absence of mottled striate melanonychia and the presence of pigmented globules are features more commonly associated with a diagnosis of CMN.

It is often impossible to exclude melanoma histologically in acral and subungual melanocytic lesions, particularly in children, due either to the use of partial biopsies or the unusual characteristics of acral melanocytic nevi in children, which can present isolated nuclear atypia and even a pagetoid distribution of some of the melanocytes.<sup>7</sup> In cases of melanonychia in which malignancy is suspected (a broad band of pigment, Hutchinson sign, irregular dermoscopic features, a dark-skinned patient), the lesion must therefore be completely excised.<sup>7,8</sup>

The management of pigmented nail lesions will therefore depend on whether the rare but very serious childhood acral lentiginous melanoma is suspected.<sup>9,10</sup> Dermoscopic and clinical follow-up should be reserved for lesions with low-risk features (narrow bands, uniform dermoscopic characteristics, no changes over time). In such cases, meticulous periodic follow-up (by dermoscopy and a photographic record) would appear to be the most suitable option, as it would avoid the potential cosmetic and functional sequelae of excision or biopsy.<sup>5,7,8</sup>

In conclusion, we have presented the third case of subungual and periungual CMN to be reported in the literature. Knowledge of this entity can help to prevent aggressive treatments (wide excision, amputation) due to the overdiagnosis of childhood acral lentiginous melanoma.

## Varicella Complicated by Rhabdomyolysis<sup>☆</sup>

### Varicela complicada con rabdomiólisis

*To the Editor:*

Primary varicella-zoster virus (VZV) infection usually occurs in childhood and in the majority of cases runs a self-limiting course. In infants, adults, and immunocompromised individuals, however, the infection can be serious if certain complications develop.

### Acknowledgments

Our thanks to Dr. Antonio Torrelo of Hospital Niño Jesús in Madrid, Spain.

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viduals, however, the infection can be serious if certain complications develop.

We report the case of an immunocompetent adult patient with VZV infection complicated by rhabdomyolysis.

The patient was a 29-year-old man, with no relevant past medical history, who presented at the emergency department with pruritic skin lesions. He said that the lesions, which were not initially filled with fluid, had erupted in successive crops over the previous 24 hours, causing intense itching. He also reported fever of 39°C, a lack of strength and energy, and loss of appetite. He had experienced general malaise for a week and had also had low-grade fever and muscle pain. Physical examination revealed a rash, mainly

☆ Please cite this article as: Martínez-Martínez ML, et al. Varicela complicada con rabdomiólisis. *Actas Dermosifiliogr.* 2013;104:448-9.

affecting the trunk, consisting of fluid-filled vesicles at different stages of development on a red base; there were no vesicles on the mucous membranes or on the palms or soles. Blood tests revealed elevated values for creatine phosphokinase (11480 U/L), aspartate aminotransferase (165 U/L), alanine transaminase (63 U/L), lactate dehydrogenase (820 U/L), and myoglobin (200.1 ng/mL). The other values were within normal ranges and included pH, 7.38; bicarbonate, 24 mEq/L; creatinine, 0.98 mg/dL; urea, 29 mg/dL; sodium, 139 mmol/L; potassium, 4.1 mmol/L; and chloride, 100 mmol/L. No abnormalities were observed on the chest radiograph. A Tzanck smear revealed the presence of multinucleated giant cells and acantholytic keratinocytes. A diagnosis of varicella complicated by rhabdomyolysis was established and the patient was admitted for treatment with acyclovir and intravenous fluid therapy with normal saline. Additional measures, such as the administration of mannitol, furosemide, or bicarbonate, were not required. During the patient's stay in hospital, human immunodeficiency virus (HIV) infection was ruled out and there was no impairment of renal function. The skin lesions and blood results improved gradually, and the patient was discharged after a week, having developed no other complications.

The most common complications of VZV infection are bacterial superinfection, laryngitis, and pneumonia. Nervous system complications include encephalitis and cerebellitis and, very rarely, polyneuritis, myelitis, radiculitis, and optic neuritis. Hepatitis and myocarditis have also been described. Rhabdomyolysis is a rare complication of primary VZV infection, with only few cases reported in the literature.<sup>1-8</sup> In otherwise healthy patients with varicella, morbidity and mortality due to rhabdomyolysis are 10 to 20 times higher in adults than in children.<sup>2</sup>

Rhabdomyolysis is characterized by massive tissue breakdown leading to the passage of toxic intracellular metabolites into the circulatory system. This can cause acute kidney failure, hyperkalemia, metabolic acidosis, and disseminated intravascular coagulation. Possible causes of rhabdomyolysis include epileptic seizures, drugs such as statins, alcohol intake, trauma, strenuous physical exercise, and, more rarely, infections. The only risk factor in our patient was VZV infection. The most common viral causes of rhabdomyolysis are influenza, HIV, and enterovirus infection.<sup>9</sup> Influenza appears to be the viral infection most commonly associated with renal impairment in patients with rhabdomyolysis.<sup>10</sup> The risk of renal impairment in patients with rhabdomyolysis secondary to VZV infection does not appear to be related to creatine phosphokinase levels.<sup>5</sup>

Although rhabdomyolysis due to primary VZV infection is believed to be rare, it might be underdiagnosed. Because creatine phosphokinase levels are not routinely measured in patients with varicella, mild to moderate cases of rhabdomyolysis could go unnoticed<sup>5</sup> in the absence of suggestive signs or symptoms such as abnormal urine color, weakness,

or intense muscle pain, as was the case with our patient.

In conclusion, rhabdomyolysis should be considered as a possible complication in patients with primary VZV infection as this will help to ensure prompt initiation of appropriate treatment to prevent potentially serious complications.

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