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IMAGES IN CLINICAL PRACTICE

BLACK LINEAR NAIL LESION IN A PRESCHOOLER

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A four-year-old Caucasian female was being observed in emergency department for an unrelated complain (dysuria), when her mother reported the presence of a black linear lesion on her right thumb nail. This was present for two years and there was no history of previous trauma or recent medication when it was initially noted. It kept the same characteristics throughout time despite the nail's growth. Her father displayed a similar lesion.

On physical exam she presented a narrow black linear pigmentation along the entire length of the nail of the first finger of the right hand (Figure 1A). There were no other lesions on the remaining hand and feet nails or in the skin.

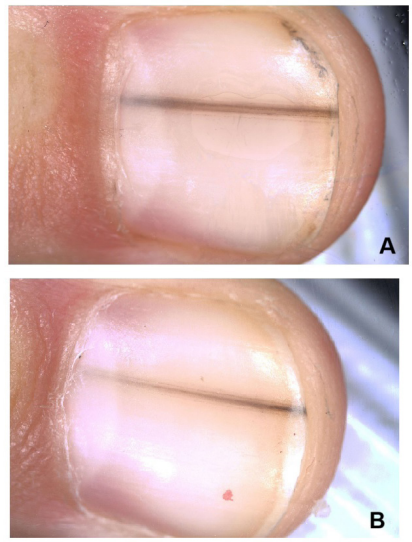
The child was referred to Dermatology where longitudinal melanonychia (LM) was diagnosed. Since the lesion was stable, conservative approach was adopted. Following two years of dermoscopic surveillance, spontaneously partial regression of the lesion was confirmed with lightening of the proximal half. (Figure 1B).

What is the diagnosis?

LM is a dark pigmentation of the nail plate that results from either activation or hyperplasia of melanocytes in the nail matrix. It is more prevalent in darked-skin individuals, mostly in adulthood, being rare in children particularly Caucasian. Familial occurrence with an early age of onset was described only exceptionally.[1]

Although it may rarely be secondary to subungual melanoma, it is typically benign in children. Clinical features that raise concern for melanoma include rapid evolution, changing pigmentation or shape, color heterogenicity, blurred lateral borders, pigment band greater than 3 mm and associated nail dystrophy. Hutchinson sign (periungual pigmentation) is a hallmark for subungual melanoma in adults but in children it may be present in benign melanonychia.[2] Most recent publications support a wait-and-see strategy in pediatric LM with clinical and dermoscopic follow-up. Biopsy is indicated in the presence of concerning signs.[1,3]

Figure 1. Dermatoscopic images: A - Pigmented band along the entire length of the nail of the right thumb without nail dystrophy at diagnosis; B - the same lesion two years later, narrower and lighter proximally.



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