transferase, CD30, CD3, CD20, serum protein S-100, CD119, and CD34. Based on these findings, the patient was diagnosed with leukemia cutis (LC). Specifically, the diagnosis was chloroma, or infiltration by myeloid or granulocytic sarcoma.

The patient was referred to the reference hospital for pediatric oncology, Hospital La Fe de Valencia, Spain, where a bone marrow biopsy was taken, showing 60% blasts. Bone marrow immunophenotyping showed that the infiltrate was composed of 54% myeloid cells (CD33+ in 100%, CD13+ in 42%) and 19% neutrophils, and the final diagnosis was established as acute myelomonocytic leukemia (M4). A spinal tap ruled out the presence of blasts in the cerebrospinal fluid, and all other examinations were normal or negative (echocardiogram, electrocardiogram, cerebral ultrasound, bone scan, and infectious serology (hepatitis B and C virus, human immunodeficiency virus, herpes simplex virus, varicella-zoster virus, and toxoplasmosis).

He received induction chemotherapy under the SHOP-LANL 2001 protocol and required 2 cycles to obtain complete remission. After the consolidation cycle, the patient underwent a transplant of hematopoietic stem cells from his HLA identical donor twin brother.

Specific leukemic infiltrates may present in various morphological forms such as papules, nodules, purpura, ulcerations, and more rarely, blisters. They may found at any site, including in areas of trauma or scars, but are more common on the head, neck, or trunk.[1]

LC is uncommon in childhood, with only a few cases published in children.[2-6] It appears more often in congenital leukemia (25%-30% of cases).[2,3] As in adults, it is associated with acute myeloid leukemia,[4] particularly in carriers of the monocyte markers M3 and M5 (10%-30%).

There is a strong association between specific cutaneous infiltration and the presence of leukemia in other extramedullary sites (cerebrospinal fluid, spleen, liver, lymph nodes, and gums). Unlike adults, in whom LC is associated with a severe prognosis, in children it does not alter the natural progression of the disease.

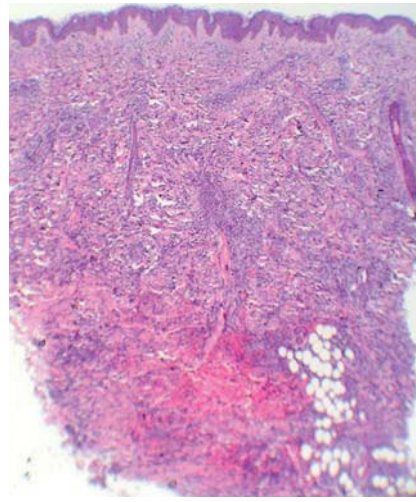

Figure 3. Dense cellular infiltration of the dermis and subcutaneous cell tissue. (Hematoxylin-eosin, ×4).

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Effectiveness of Topical Application of Nitroglycerin Spray to Increase Survival of Cutaneous Flaps and Grafts

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To the Editor:

Necrosis of surgical sites is a common complication in dermatological surgery that can lead to clearly obvious cosmetic blemishes, an increased risk of infection, and further surgery on occasions. Various factors are implicated in its development,[1] but the main one is insufficient blood flow resulting from arterial insufficiency. Trials have been conducted with different systemic treatments, such as nifedipine,[2] pentoxyphylline, and allopurinol, as well as topical treatments such as prostaglandins,[3] minoxidil,[4] and nitroglycerin,[5-7] in order to enhance the survival of flaps and grafts, with conflicting results found in the dermatological literature.[8]

Nitroglycerin is a potent arterial and venous vasodilator that enhances local

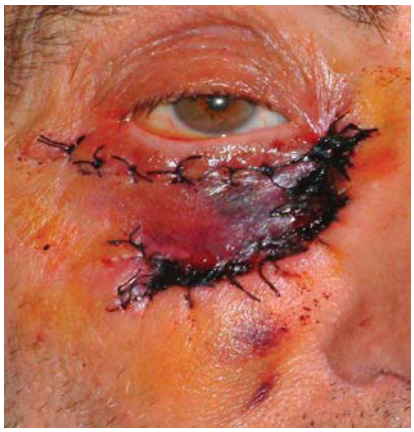

Figure 1. 24 hours postoperative.

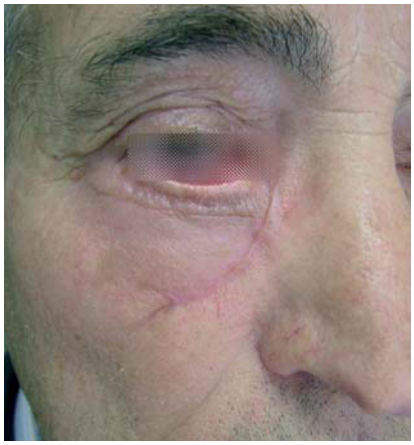

Figure 2. Skin flap survival after topical treatment with nitroglycerin spray 3 times a day for 7 days is evident.

blood flow, without increasing the precapillary to postcapillary resistance ratio, and has been used topically in cardiological patients, in anal fissures, or as an expander of collapsed peripheral veins. Its use in dermatological surgery is not yet well established, and the results reported are sometimes conflicting.

In our experience, we have found that early use of topical nitroglycerin administered as a spray (Trinispray) 4 times a day for the first 7 days over the entire flap and the surrounding skin has allowed us to recover surgical sites and grafts with considerable skin injury that would otherwise have progressed irremissibly toward skin necrosis.

We describe an 80-year-old male smoker with solid basal cell carcinoma near the internal canthus of the lower right eyelid. Figure 1 shows the immediate postoperative period, 24 hours after the procedure was completed. The distal area of the flap showed evident signs of skin injury. After the topical application of nitroglycerin spray 3 times a day for 7 days, we obtained survival of the surgical site, as shown in Figure 2.

The literature contains contradictory data on the use of topical nitroglycerin. A single dose in ointment form, applied in the immediate postoperative period, does not appears to be beneficial, as reported by Dunn et al.[9] In our opinion, the spray is more effective when used every 6 hours and could be beneficial in dermatological surgery, enhancing the survival of skin plasties and grafts that show signs of injury, or as prevention in high-risk patients, such as smokers or patients with diabetes.

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