

ABCDEF Rule Guides Melanonychia Diagnosis

BY DOUG BRUNK

SAN DIEGO — Of the many cases of longitudinal melanonychia—a longitudinal brown-black discoloration of the nail plate—only a fraction are subungual melanomas.

“With some of these you know they’re going to require an extensive work-up or biopsy,” Dr. Arash Izadpanah said at a melanoma update sponsored by the Scripps Clinic. “Others are not so concerning, but it’s not always intuitive whether these are benign or malignant.”

In 2000, researchers led by Dr. Eyal K. Levit created a modified ABCDEF rule for the clinical detection of subungual melanomas (*J. Am. Acad. Dermatol.* 2000;42:269-74).

In this mnemonic, **A** stands for age, with the peak incidence occurring in the fifth to seventh decade of life.

B stands for black-brown band with a width greater than 3 mm. “The size of



‘Longitudinal melanonychia is the first manifestation in 38%-76% of nail apparatus melanoma.’

DR. IZADPANAH

the band is crucial,” said Dr. Izadpanah of the division of dermatology at Scripps in San Diego.

C stands for change in morphology such as color and width. Subungual melanomas may have blurred indistinct margins or a variation in band color.

D stands for involvement of digits, particularly the thumb, the great toe, and the index finger. “If there’s dystrophy of the nail, unfortunately that’s a late finding,” he said.

E stands for extension of pigment to the periungual folds, and **F** stands for family history of melanoma.

“The most important thing is using your clinical judgment,” he said.

Longitudinal melanonychia stems from either melanocytic activation or melanocytic hyperplasia. In melanocytic activation—the most common cause of longitudinal melanonychia in adults—“the melanocytes are there and something happens to get them producing

melanosomes and pigment, but there is no actual increase in the number of melanocytes,” Dr. Izadpanah explained.

Melanocytic hyperplasia—the most common cause of longitudinal melanonychia in children—is marked by an increase in the number of matrix melanocytes. “This could be for benign or malignant reasons,” he said.

Certain racial groups are susceptible to melanocytic activation, including African

Americans, Chinese, Japanese, and Native Americans. Other physiologic causes include pregnancy and trauma to the nail, Dr. Izadpanah said.

Dermatologic causes of melanocytic activation include psoriasis, lichen planus, amyloidosis, systemic lupus erythematosus, onychomycosis, and nonmelanocytic tumors.

Systemic causes of melanocytic activation include endocrine disorders such

as Addison’s disease and Cushing’s syndrome, hyperthyroidism, and acromegaly. Other possible culprits include vitamin B₁₂ deficiency, malnutrition, alcaptonuria, porphyria, graft-versus-host disease, AIDS, Laugier-Hunziker syndrome, and Peutz-Jeghers syndrome.

Iatrogenic causes of melanocytic activation include radiation and a host of commonly used medications, including antimalarials, minocycline, sulfonamides,

FOR THE MANAGEMENT OF MODERATE TO SEVERE CHRONIC PAIN



EMBEDA®
(morphine sulfate and naltrexone hydrochloride) Extended Release Capsules

For more information, please visit www.EMBEDA.com.

Important Safety Information

WARNING: EMBEDA® (morphine sulfate and naltrexone hydrochloride) Extended Release Capsules contain morphine, an opioid agonist and a Schedule II controlled substance with an abuse liability similar to other opioid agonists. EMBEDA® can be abused in a manner similar to other opioid agonists, legal or illicit. This should be considered when prescribing or dispensing EMBEDA® in situations where the physician or pharmacist is concerned about an increased risk of misuse, abuse, or diversion.

EMBEDA® contains pellets of an extended-release oral formulation of morphine sulfate, an opioid receptor agonist, surrounding an inner core of naltrexone hydrochloride, an opioid receptor antagonist indicated for the management of moderate to severe pain when a continuous, around-the-clock opioid analgesic is needed for an extended period of time.

EMBEDA® is NOT intended for use as a prn analgesic.

EMBEDA® 100 mg/4 mg IS FOR USE IN OPIOID-TOLERANT PATIENTS ONLY. Ingestion of these capsules or the pellets within the capsules may cause fatal respiratory depression when administered to patients not already tolerant to high doses of opioids.

Patients should not consume alcoholic beverages while on EMBEDA® therapy. Additionally, patients must not use prescription or non-prescription medications containing alcohol while on EMBEDA® therapy. The co-ingestion of alcohol with EMBEDA® may result in an increase of plasma levels and potentially fatal overdose of morphine. EMBEDA® is to be swallowed whole or the contents of the capsules sprinkled on apple sauce. The pellets in the capsules are not to be crushed, dissolved, or chewed due to the risk of rapid release and absorption of a potentially fatal dose of morphine.

Crushing, chewing, or dissolving EMBEDA® will also result in the release of naltrexone which may precipitate withdrawal in opioid-tolerant individuals.

Please see additional Important Safety Information and Brief Summary of full Prescribing Information, including boxed warning, on the following pages.

Guide to Coping With Medical Debt

Families USA is offering a free, downloadable consumer guide, “Your Medical Bills: A Consumer’s Guide to Coping With Medical Debt.” The guide provides step-by-step advices for people who are overwhelmed by their medical bills. To download the guide, visit the Families USA Web site at www.familiesusa.org/assets/pdfs/medical-debt-guide.pdf.

ketoconazole, zidovudine, and chemotherapy agents.

Melanocytic hyperplasia can occur in the form of benign lesions such as a lentigo or a nevus, or in the form of malignant lesions such as melanoma in situ or invasive melanoma. "Longitudinal melanonychia is the first manifestation in 38%-76% of nail apparatus melanoma," Dr. Izadpanah said.

Dermoscopy can be useful in evaluating melanonychia, "but the main limitation is that you're examining pigment that's deposited in the nail plate, when the action is really in the nail matrix, so

you're indirectly seeing what's going on," he said. "It's not as useful as it might be for melanocytic lesions of the skin."

He went on to note that the majority of melanocytes that give rise to longitudinal melanonychia become active in the distal matrix, not in the proximal nail matrix. "That's important, because the proximal nail matrix gives rise to the vast majority of the nail plate," he said. "So if you do a biopsy of the distal nail plate, you're probably not going to cause any significant lasting damage to the nail."

Before a biopsy, visualize the source of melanocytic activity. This requires mak-

ing a small cut in the proximal nail fold and lifting it for inspection. "In most cases you can remove the whole nail or the proximal part of the nail or do two punch biopsies: one to get part of the nail out, and a second, deeper one that reaches bone," Dr. Izadpanah said.

Lesions greater than 3 mm in width require a transverse elliptical excision. The goal here is "to get the pigment but try to avoid damage to the proximal nail matrix, so as to not cause nail dystrophy," he said.

Dr. Izadpanah had no relevant conflicts to disclose.

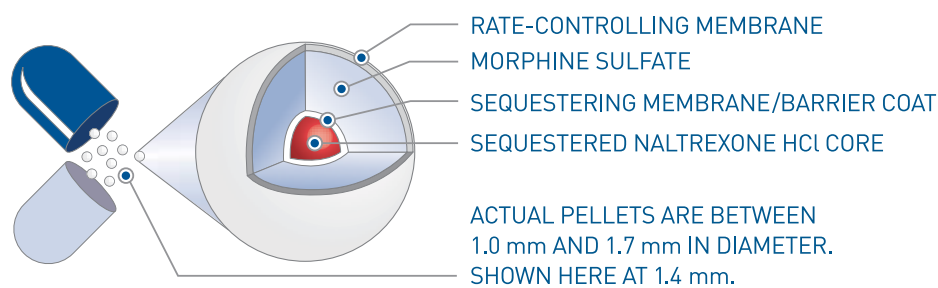


COURTESY DR. ARASH IZADPANAH

Patients who have melanocytic lesion bands that are greater than 3 mm in width require a transverse elliptical excision.

THE FIRST-OF-ITS-KIND TECHNOLOGY IN CHRONIC PAIN MANAGEMENT

EACH PELLETT CONTAINS MORPHINE SULFATE SURROUNDING A SEQUESTERED CORE OF NALTREXONE HCl¹



Data on file.²

6 DOSING STRENGTHS



Capsules shown are not the actual size.

INDICATIONS AND USAGE

- EMBEDA[®] is an extended-release oral formulation of morphine sulfate and naltrexone hydrochloride indicated for the management of moderate to severe pain when a continuous, around-the-clock opioid analgesic is needed for an extended period of time
- EMBEDA[®] is NOT intended for use as a prn analgesic
- EMBEDA[®] is not indicated for acute/postoperative pain or if the pain is mild or not expected to persist for an extended period of time. EMBEDA[®] is only indicated for postoperative use if the patient is already receiving chronic opioid therapy prior to surgery or if the postoperative pain is expected to be moderate to severe and persist for an extended period of time