‘When in Doubt, Biopsy’ Nail Pigment Streaks

BY KATE JOHNSON
Montreal Bureau

SAN DIEGO — A longitudinal pigmented streak beneath the nail could either be a benign melanonychia striata or a far-from-benign subungual melanoma, but despite the vast difference in prognosis, the two conditions are very difficult to tell apart clinically, Dr. Constance Nagi said at a melanoma update sponsored by the Scripps Clinic.

“When it’s melanoma, patients often present with late-stage disease, because there is frequently a delay in the correct diagnosis,” she warned, adding that late-stage subungual melanoma carries a 5-year survival rate of 16%-61%. The delay often occurs because it is mistaken for infection or inflammation resulting from trauma.

To add to this confusion, both types of lesions can develop as a result of trauma, and thus both are more commonly seen on thumbs, index fingers, and great toes. Furthermore, melanonychia striata can sometimes be an early sign of melanoma, she noted.

Despite these similarities, there are some key clues that distinguish melanonychia striata from subungual melanoma, said Dr. Nagi, clinical professor of medicine/dermatology at the University of California, San Diego.

Hutchinson’s sign, though not always present, is a valuable clue to melanoma diagnosis. This periungual spread of pigmentation to the proximal or lateral nail folds is usually a late sign of melanoma, though absence of it does not imply a benign lesion, she said.

Be suspicious of benign melanonychia striata—usually occurring as a black, brown, or tan longitudinal streak within the nail—if it suddenly darkens or widens, or if it has blurred lateral borders. Additionally, the presence of nail dystrophy, either partial or complete, is a suspicious sign, she pointed out.

The sudden appearance of a nail streak in a single digit in adult life also warrants careful examination; this is especially true for patients who are at increased risk for melanoma or have a history of it.

Dr. Nagi warned that subungual melanoma is often asymptomatic and that up to 25% of cases can be amelanotic, so it is easily mistaken for pyogenic granuloma, chronic granulation tissue, or mycobacterial infection with nail dystrophy.

“When in doubt, biopsy,” she advised, adding that complete excision of the lesion should be considered, if feasible. Patients should be informed preoperatively about the possibility that the biopsy could result in permanent nail dystrophy.

Nail streaks, both benign and malignant, are more common in dark-skinned people than in whites, Dr. Nagi said. Subungual melanoma makes up 15%-20% of all melanomas in African Americans and 2%-3% of all melanomas in whites.

Benign melanonychia striata is uncommon in whites but occurs in virtually 100% of African Americans by age 50 years.