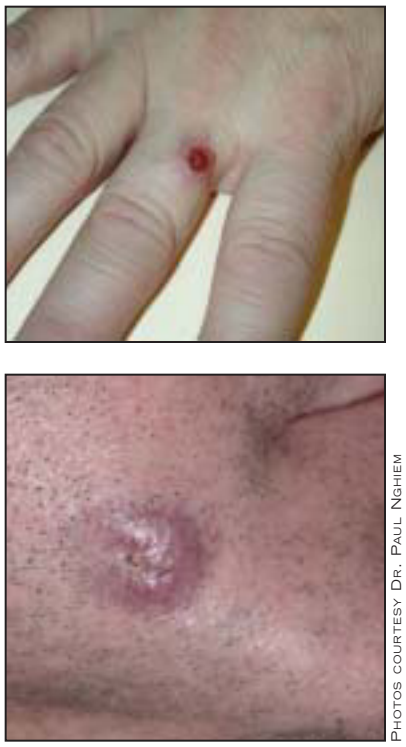
Merkel Cell Carcinoma Follows Unusual Path

BY DOUG BRUNK

PORTLAND, ORE. — Skin lesions are a hallmark of Merkel cell carcinoma, yet dermatologists are often left out of the loop in diagnosing patients with the disease, said Dr. Paul Nghiem.

"These [lesions] are typically biopsied as a cyst and the patient usually has to argue for one, two, or three doctor's visits to have the lesion biopsied," Dr. Nghiem said at the annual meeting of the Pacific Dermatologic Association. They're usually biopsied by a physician "who thinks they're taking off a cyst. Then they may be referred to medical oncology or to surgical oncology, but rarely to dermatology."



PHOTOS COURTESY DR. PAUL NGHIEM

The majority of Merkel cell carcinoma lesions appear on sun-exposed skin and are often mistaken for cysts.

About 1,500 new cases of Merkel cell carcinoma (MCC) are diagnosed in the United States each year (J. Invest. Dermatol. 2007;127: 2100-3), which is about the same incidence as cutaneous T-cell lymphoma or dermatofibrosarcoma protuberans, said Dr. Nghiem, an expert on the disease who is associate professor of dermatology, medicine, and pathology at the University of Washington, Seattle.

MCC is significantly more lethal than melanoma (40% vs. 15%, respectively), and its reported incidence has increased threefold since 1986 (J. Surg. Oncol. 2005;89:1-4). "A big reason for that is that it's not missed as much," Dr. Nghiem said. "There are better tools for pathologists to use to make the diagnosis."

The three main risk factors for MCC are prolonged sun exposure, immune suppression, and age over 50 years. "Ninety-four percent of all MCC cases are in people aged 50 or older," he said. "There is a very strong synergy with age" (J. Am. Acad. Dermatol. 2008;58:375-81).

Dr. Nghiem said that HIV-positive patients had about a 13-fold increase of MCC in one study (Lancet 2002;359:497-8), while another study showed that solid organ transplant recipients have about a 10-fold increase (Transplantation 1999;68:1717-21).

He and his associates devised the acronym AEIOU to describe the clinical features of Merkel cell carcinoma based on an analysis of 195 patients given the diagnosis between 1980 and 2007 (J. Am. Acad. Dermatol. 2008; 58:375-81). The acronym stands for **A**symptomatic, **E**xpanding rapidly, **I**mmune compromised, **O**lder than 50, and **U**V-exposed, fair skin.

"Under no circumstances do I think that this is a highly specific test," said Dr. Nghiem, whose clinic is based at the Fred Hutchinson Cancer Research Center in Seattle. "It's not going to be up there with the ABCDs of melanoma, but if you see these characteristics together, you may want to think about doing a biopsy."

More than half of the lesions in the 195 patients evaluated (56%) were presumed to be benign at biopsy, and 32% presented on the head and neck, followed by the lower limb (30%), upper limb (20%), trunk (10%), and buttock (8%).

The majority of lesions (81%) presented on sun-exposed skin, but one in six was in a sun-protected site.

Nearly all of the lesions (88%) were asymptomatic ("neither tender nor itchy," he said), 63% doubled in size in the past 3 months, and 8% of the patients were profoundly immune suppressed.

"That is a 16-fold increase over the normal population, but still a minority of all Merkel cell cases," he said, noting that 90% of the patients studied were at least 50 years of age and that 98% were fair skinned.

"Taken together, 89% of all Merkel cell carcinomas had three or more of these clinical AEIOU features," Dr. Nghiem said.

Optimal therapy for MCC is unique among skin cancers, he said, in that sentinel lymph node biopsy (SLNB) is usually indicated and the disease is "exquisitely sensitive" to radiation.

"If I had one modality to treat MCC, it would be radiation," he said.

SLNB is important for prognosis, he added, because it "results in more accurate staging and has therapeutic implications. If it's microscopically positive [the cancer] will very likely develop in that node bed within a few months if you don't do anything."

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