## Cranial Neuropathy Signals Skin Cancer Return

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Contributing Writer

VANCOUVER, B.C. — Cranial neuropathy may be the first sign or symptom of a skin cancer recurrence, and as such it is often misdiagnosed, a dermatologist/otolaryngologist said.

Neurotropic skin cancer is an uncommon but aggressive form of skin cancer, Dr. Joel W. Cook reported at the annual meeting of the American College of Mohs Surgery.

"Most of the neurotropic findings are histologic and any symptoms are reasonably unusual; most studies say that it's very rare. To have [patients] present to your office with neurologic findings as their sentinel event in the recognition of recurrent skin cancer is even rarer," he said.

In the retrospective study, Dr. Cook of

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the Medical University of South Carolina, Charleston, and his colleagues reviewed the charts of patients who had previously had skin cancer and were referred to the university's head and neck program between 1999 and 2007.

The chart review identified six patients in whom cranial neuropathy was the initial sign or symptom of recurrent skin cancer.

Five of the patients had previously undergone multiple excisions of skin cancer, and two had undergone Mohs surgery for a primary lesion, he said.

The cancer was squamous cell carcinoma in four cases and desmoplastic melanoma in two. "Importantly, none of the six patients" was a transplant patient, he noted.

"One had an indolent chronic myelogenous leukemia, but they were all reasonably immunocompetent," he said.

The majority of the patients had multiple cranial neuropathies; all had deficits of cranial nerve V, and half had deficits of cranial nerve VII.

The presenting symptoms were most commonly facial numbness; facial paralysis or weakness; facial pain; diplopia; and paresthesia.

Less common symptoms were formication and hearing loss. The symptoms had been present for 7 months, on average, before diagnosis.

In nearly all cases, the cranial neuropathy had been misdiagnosed as trigeminal neuralgia, Bell's palsy, or some other condition, said Dr. Cook.

Neurotropism was identified histologically in five patients who underwent surgery or biopsy, and cranial nerve involvement was confirmed in all patients by MRI.

"It's important to know what imaging study to order in these patients," Dr.

Cook pointed out. "Although CT is an excellent method to image head and neck malignancies, . . . it cannot be used to evaluate for the presence or absence of neurotropic tumor. In that case or with that suspicion, you would want to get an MRI; this is by far the preferred imaging modality."

Five of the patients underwent treatment for their recurrence with various combinations of surgery, radiation therapy, and chemotherapy.

"As you can imagine, the surgery in these patients is salvage surgery and is amazingly extensive. These patients have to be counseled preoperatively, they have to be adequately staged, and they need multidisciplinary consultations," Dr. Cook said.

"But surgery is the only chance these patients have to survive," he added.

Three of the patients eventually died, with evidence of metastases. The other three, however, all of whom had under-

gone surgery, were still alive without evidence of disease 2.5-6 years after their operations.

Dr. Cook concluded that any time a patient is found to have a cranial neuropathy and that patient has previously undergone resection of a high-risk skin cancer, "you need to be very skeptical of an alternative diagnosis other than neurotropic recurrence."

He reported no disclosures in association with the study.



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Underwritten through an educational grant from Galderma Laboratories