A combination of surgery, topical imiquimod, and pressure therapy may stave off the need for radiation.

For hypertrophic scars, Dr. Koch performs scar revision surgery and will start intralesional steroids at the first sign of hypertrophic scar recurrence. He also said he may use compression or silicone gel.

The most promising upcoming therapies for keloids and hypertrophic scars may be pulsed dye laser and photodynamic therapy (PDT). Dr. Wong said. Keloids are hypervascular lesions, and the pulsed dye laser disrupts blood supply, using a very narrow, local heat effect to trigger apoptotic mechanisms. When he removes a keloid, he sends the patient to a dermatologist for targeted pulsed dye laser therapy.

Studies of PDT for cancer have shown that it does not successfully treat malignancies but seems to decrease scar formation. Since PDT has no ionizing radiation, it can treat the keloid while preserving the normal tissue matrix. Dr. Wong plans to begin using PDT in patients with refractory keloids soon. “It’s like a neutron bomb—you can kill the occupant but leave the house intact,” he said. “There’s no downside in the correct patient.”

Dr. Koch was less enthusiastic about flashlamp and pulsed pulsed dye laser therapy for keloids. This strategy mainly helps take the red out of the lesions, he said.

Metaanalysis Yields Mixed Results in Keloid, Hypertrophic Scar Treatment

Most of the available treatments for keloids or hypertrophic scars offer a minimal likelihood of improvement, a metaanalysis suggests.

The metaanalysis of results from 70 trials found a 70% chance of improvement from treatment. The management regimen improved lesions by a mean of 60%, compared with baseline, and a few therapies were no better than observation alone. Dr. Douglas Leventhal reported in a poster presentation at the international symposium.

There is no universally accepted treatment regimen for keloids or hypertrophic scars and no evidence-based literature to help clinicians choose from among the many treatment options that have already been tried. Management has evolved over the years from crude, invasive methods such as gross excision and radiation to intralesional or topical agents that work on a cellular level, wrote Dr. Leventhal of Jefferson Medical College, Philadelphia.

Some current treatments for keloids or hypertrophic scars may provide clinically significant improvements, but results fall far short of a cure, he concluded.