Experience Is Key to Tackling Tough Mohs Cases

Collaboration with other surgical specialists may aid treatment of aggressive, unpredictable tumors.

BY HEIDI SPLETE

Senior Writer

SAN DIEGO — Certain areas of the body are more challenging than others when it comes to Mohs surgery: the nose, ears, and eyelids, as well as urology cases and orthopedic cases on the hands and feet.

These are the places where surgeons, especially beginners, are more likely to get into trouble and where tumors tend to be more aggressive. "Anywhere the skin is closer to bone, the tumor is more likely to spread in an unpredictable manner," Dr. Roger I. Ceilley said at a meeting sponsored by the American Society of Mohs Surgery.

To tackle the tough Mohs surgery cases, physicians need a lot of experience and time spent working with other surgeons, said Dr. Ceilley, a Mohs surgeon

and dermatologist in practice in Iowa.

Cancers in the nose, which tend to be deeply invasive and can be hard to detect, have a higher recurrence rate, compared with cancers in other areas, he said. Particularly tricky areas around the nose are the columella, nasolabial groove, supra tip area, and lateral nasal dorsum. Before performing Mohs surgery on tumors of the nose, physicians should conduct a scouting biopsy to determine the extent of the lesions and to remove all scar tissue. Be aware that a tumor of the nose could be the tip of a larger iceberg, and prepare in advance for possible collaboration with a head and neck surgeon, he advised.

Treating cancer of the ear with Mohs surgery may involve working around the parotid gland, as well as around many nerves. Skin cancers of the ear have a 16%-47% recurrence rate, which is high-

er than that of skin cancers elsewhere. For these cases, it is important to know the anatomy of the ear, especially the nerve distribution and nerve supply. The anatomy of the ear is complex, and the surgeon must anticipate that the tumor may be much larger than it appears clinically. That said, the back of the ear is a good place to perfect one's skin flap technique, he noted.

Most surgeons can handle procedures on the lower eyelid, but upper eyelid tumors require an immediate repair and the use of an eye shield to protect the cornea and prevent corneal dryness.

"I wouldn't tackle tumors on the upper eyelid if you think it will be full thickness because you need to do an immediate repair, and you have to keep a corneal shield in place on the eye to prevent drying of the cornea. A little carbon char can cause a corneal abrasion. Make sure you use plenty of ointment before and after surgery," he said.

If you plan to perform Mohs surgery in the genital area, arrange ahead of time to work with a urologist. Dr. Ceilley discussed a patient with penile cancer who was slated for a penectomy, but was not enthusiastic about that idea and wanted to try Mohs surgery. (See photo.)

The surgery involved use of a catheter, and the tumor had to be followed into the urethra. After excision of the tumor, the wound was not sutured, but allowed to heal by second intention. The patient has had no recurrence of cancer to date. "He has to watch where he points, but he has a functional penis," Dr. Ceilley said.

Mohs surgery also may be used to successfully treat cancer, especially squamous cell carcinoma, on the extremities. In the case of a verrucous squamous cell carcinoma, "the tumor went nearly through to the other side of the foot," he said. Dr. Ceilley collaborated with an orthopedic surgeon, who amputated several toes. The surgeon used the skin from those toes to create skin flaps and give the patient a functional foot. (See photo.)

Expect the unexpected in Mohs cases. "You can find tumors that look like a basal cell carcinoma and turn out to be a Merkel cell carcinoma," he said.

Microcystic adnexal carcinoma, a rare



A squamous cell carcinoma of the penis was successfully excised.



provided skin flaps for a functional foot.

but deeply infiltrating tumor, can be treated by an experienced Mohs surgeon. Characteristic features of microcystic adnexal carcinoma include a bland appearance, ambiguous histopathology with bizarrely shaped parent cells, and aggressive clinical behavior. Permanent horizontal sections are highly useful in these cases, Dr. Ceillor said

Lentigo maligna also can be treated with Mohs surgery, and surgeons can use imiquimod (Aldara) to decrease the size of the area prior to surgery and to facilitate healing after surgery.

Finally, for challenging or complex cases, Dr. Ceilley recommends getting permanent paraffin-embedded sections, in addition to the multiple frozen sections that may be needed.

Tips to Ensure Successful Mohs Surgery

"Ican't overemphasize the importance of documentation, and following the procedures for [the Occupational Safety and Health Administration] and quality control. This is serious stuff, and if you are going to do Mohs surgery, you need to do it properly," Dr. Ceilley said.

Procedures must be fully explained to patients. Use an analogy that they can understand, such as that of a dandelion: If you don't pull out the weed with all of the roots, it will grow back.

Once the patient is in the operating room, the surgeon has to remember not to perform the repair until the tumor has been entirely removed. It may even be a good idea to wait until the next day to finish a procedure, or consider doing a partial repair to last until the evaluation is complete.

After a layer is removed, pressure should be put on the wound before cautery. "I take the amount of time it takes me to divide, mark, and map a

specimen, and then go back and cauterize," Dr. Ceilley said. "It takes you half as long to do the cautery, and you char less tissue."

A Mohs surgeon should not be afraid to ask for help, whether from surgical colleagues or a dermatopathologist. Cultivate a relationship with a good dermatopathologist, because some poorly differentiated tumors and difficult squamous cell cancers are hard to read, he said.

If a tumor is aggressive, the surgery should be equally aggressive. In those cases, "I might do paraffin-embedded slides, special stains, and take extra tissue as needed," Dr. Ceilley noted.

Last but not least, physicians need to remember that bad days will happen. They should try to anticipate problems and have backup options in mind, he emphasized. "Some of the repairs that I could do, I will refer because I know head and neck surgeons who would do the surgery more effectively."

Consistency Is Key in Surgeon, Technician Relationship

BY HEIDI SPLETE
Senior Writer

SAN DIEGO — Direct, honest, and consistent communication between a Mohs surgeon and his or her technician is necessary for a high-functioning, organized partnership, said Alex Lutz at a meeting sponsored by the American Society for Mohs Surgery.

Neither party should rely on assumptions regarding procedure. The physician should not assume that the technician has understood instructions and followed the proper process each time, nor should the technician assume that the physician has conducted the surgery the same way each

time, said Mr. Lutz, a Mohs technician in Torrance, Calif.

The technician must be able to tell the surgeon that the technician has made a mistake and be honest enough to admit it, Mr. Lutz said. Likewise, the physician must be able to tell the technician if something went wrong—if the technician didn't get enough of a base for the specimen or did something differently from the agreed-upon standards. "Without that sort of communication, errors will be made," Mr. Lutz said. "It's all about checks and balances."

With this kind of communication in place, the Mohs surgeon and the technician can keep the surgical practice orga-

nized by agreeing upon a standard way to process specimens. If something about a specimen doesn't make sense, both parties must feel comfortable asking questions in order to avoid errors. For example, the surgeon who usually puts double hatch marks to indicate 12:00 on a specimen may put them at 3:00 for some reason, causing confusion for the technician.

He offered several standardization tips to enhance physician-technician harmony. For the physicians:

- ► Choose a method to denote a true 12:00; it can be a pattern of marks or something else.
- ▶ Bring specimens to the technician in a petri dish of saline to avoid dehydration.

- ▶ Develop a standard inking format and a standard staining regimen.
- ► Send the Mohs map to the technician along with the slides. "Don't get into the habit of making the map later; the technicians need it," Lutz said.

For the technicians:

- ▶ Pick up slides the same way each time, and determine the surgeon's preference as to whether they want the first cut closer to the frosted edge or the opposite.
- ▶ Note the time and location of all tissue cuts on the Mohs map.
- ▶ Process multiple specimens in an organized fashion. Technicians should label slides and place them in the cryostat the same way each time. ■