UVa HealthSystem TODAY

ACHIEVING OPTIMAL NASAL RECONSTRUCTION

Reconstructive surgery may be required after Mohs surgery removes skin cancer on the nose.

Stephen S. Park, M.D., FACS, a facial plastic surgeon at UVa, explains that the forehead flap has been the workhorse for major nasal reconstruction for many decades, and today offers one of the most dependable ways of achieving excellent aesthetic results while preserving normal nasal function.

For nearly all Mohs patients – or anyone needing nasal reconstruction – Park says, "patients should expect to be breathing normally and to be able to return to social activities." But sometimes this outcome is not achieved. "The most common problem with forehead flaps is that they are brought down too thick and do not blend in well with the normal topography of the nose," Park says.

For Park, who performs a nasal reconstruction two to three times weekly, creating an inconspicuous reconstruction is always his highest objective. He notes that Mohs patients are often extremely anxious about the procedure, but find comfort in knowing that a facial plastic surgeon experienced with nasal reconstruction is part of their team.

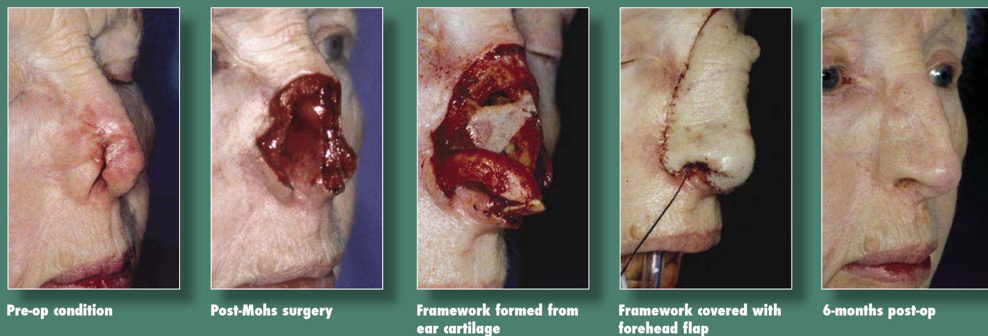
TWO-STAGE PROCEDURE

Once internal lining and structural issues are addressed, Park resurfaces the nose with the forehead flap in a two-stage procedure. The first stage involves elevating the flap from the forehead, while leaving it attached inferiorly, near the inside of the eyebrow. This creates a pedicle that draws from the area's rich blood supply to nourish the skin paddle (the part of the flap covering the nose). The paddle is then selectively thinned to match the varying thickness and mobility of nasal skin and is rotated 180 degrees to create a new surface. Finally, the forehead is closed. The first stage is an outpatient procedure, and can often be performed the same day as the Mohs surgery.

The second stage takes place roughly three weeks later – the amount of time necessary for a new blood supply to grow from the nose into the skin paddle – and involves severing the pedicle. "The wait time between stages can be very trying for patients, as activity level is greatly restricted," says Park.

SINGLE-STAGE PROCEDURE

In rare cases, Park will perform the forehead flap in a single-stage procedure, during which the pedicle is de-epithelialized and concealed under the skin's surface. But this is considered only in the most extreme circumstances, such as when a patient cannot endure the hardship of waiting or restricting activity for three weeks, and is willing to accept a significant disfigurement. "I firmly believe the single-stage procedure is pushing the limits of the forehead flap and must be reserved for very specific and ideal candidates," Park says.



Pre-op condition | Post-Mohs surgery | Framework formed from ear cartilage | Framework covered with forehead flap | 6-months post-op

Stephen Park, M.D., performs 2 to 3 nasal reconstructions weekly. Above, one of his two-stage reconstructions.

Regional Network Gives Infants Best Start in Life

Dozens of extremely premature and critically-ill babies born in Virginia today wouldn't have survived as recently as a decade ago. That's because of a growing interdependent system of physicians and medical centers in northwest and western Virginia with the University of Virginia regional perinatal center as its hub.

CARING FOR COMPLEX CASES

The main advantage UVa provides is the ability to offer "service at all levels," says John Kattwinkel, M.D. With a Level III Newborn Intensive Care Unit – which provides the highest level of care for the most at-risk infants – UVa is a referral center for hospitals as far north as Winchester and as far south as Lexington and Lynchburg.

UVa specializes in providing complicated services to newborns throughout the region, such as the heart-lung bypass machine known as ECMO (extracorporeal membrane oxygenation). UVa also treats a sizable number of babies with congenital malformations that require heart or pediatric surgeries. "These are life-threatening congenital conditions that need to be addressed very quickly," Kattwinkel says.

Half the babies treated by UVa are extremely premature infants – some as much as four months premature and weighing as little as one pound. Some patients stay as long as 120 days, Kattwinkel adds. These lengthy stays provide challenges for the patient's family.

RESOURCES FOR FAMILIES

"We provide extensive resources for the family," Kattwinkel says. UVa has added four beds to its NICU, located on the seventh floor of University Hospital in an expanded, more family-friendly facility.

"We also have two new pre-discharge rooms for mothers to learn how to take care of babies with lung or digestive problems who have been here for two to three months," said Kattwinkel.

A timely referral of the baby to UVa is key to successful outcomes. "We're working with perinatologists and obstetricians to work with mothers to get them transferred here ahead of time," he said. "We depend on this network of hospitals – with patients and information flowing both ways. We also depend upon the capability of the referring hospitals – when to call us, when to transfer the babies, how to stabilize them and how to treat them once they've been transferred back to them. The regional hospitals function as a team," he said. "And as a team, we can give these infants the best possible start in life."

As a regional perinatal center, UVa Health System:

- Works with a network of hospitals and region's perinatologists and obstetricians to provide treatment to premature and critically ill newborns
- Trains staff at nine hospitals in stabilization techniques and post-critical care treatment for infants who are released from UVa
- Maintaining its newly expanded 45-bed Level III NICU with 24-hour consultation
- Staffs and runs a sophisticated mobile NICU that transports babies to and from the hospital
- Conducts research to help advance perinatal medicine

"To be able to give a child a new lease on life is pretty wonderful," says Kattwinkel, head of UVa's Division of Neonatology. "We're a very key part of the network of facilities serving high-risk mothers and babies. This system wouldn't work without us. It also wouldn't work without the (other) neonatal intensive care units as well."

To refer a patient to UVa Children's Hospital NICU, call UVa Physician Direct at 800-552-3723.