American Medical NEWS

Surgery brings back smiles and blinks to faces.

A procedure described in this month's Archives of Otolaryngology holds promise for restoring the capacity for expression in patients whose faces might otherwise remain paralyzed, following destruction of their facial nerves from surgery or trauma.

Michael E. Sachs, MD, and John Conley, MD, from Columbia-Presbyterian Medical Center, New York, have developed a procedure combining a nerve graft with muscle transposition that results in a closer approximation of natural facial expression than has been achieved with previous procedures.

They report excellent results over a 10-year period in 35 patients with facial paralysis.

Normally, the facial nerves on each side of the face branch into several distinct muscle groups, allowing them to move independently for the purposes of blinking, chewing, swallowing, and smiling, Dr. Sachs explains. When the trunk of the nerve connecting it to the brain is severed, that side of the face becomes paralyzed.

To facilitate independent movement of the upper part of the face, Drs. Sachs and Conley construct a nerve graft to reconnect the trunk of the facial nerve to its branches surrounding the eye. To control movement in the lower part of the face, they divide the masseter (chewing) muscle and transpose the two parts, with their own nerve supply, to areas above and below the mouth.

The muscle transposition works immediately, allowing the patient to chew and swallow. In about nine months, the nerve graft becomes operative and the patient is able to blink and otherwise voluntarily use his eye muscles. Peak improvement is usually attained after about two years, Dr. Sachs says.