# Mobius Syndrome

Mobius syndrome is a rare genetic disorder. It causes facial paralysis.

## CAUSES

This syndrome is caused by the absence or underdevelopment of the 6th and 7th cranial nerves. These nerves control eye movements and facial expression.

## SYMPTOMS

In newborns, the first symptom is an inability to suck. Excessive drooling and crossed eyes (*strabismus*) may occur. Other symptoms may include:

- Lack of facial expression.
- Inability to smile.
- Feeding, swallowing, and choking problems.
- Eye sensitivity.
- Mental retardation.
- Motor delays.
- High or cleft palate.
- Hearing problems.
- Speech difficulties.
- Low muscle tone, especially in the upper body.
- Deformities of the tongue, jaw, and limbs may also happen.
  - Examples include club foot and missing or webbed fingers.
- As children get older, lack of facial expression and inability to smile become the most visible symptoms.
- Mobius syndrome may be accompanied by Pierre Robin syndrome. This is a disease in which there is:
  - An abnormally small jaw.
  - Downward displacement of the tongue.
  - A soft, cleft palate.
- It may also be accompanied by Poland's anomaly. This disease causes:
  - Abnormal development of one side of the chest.
  - Limb deformities.

## TREATMENT

There is no specific course of treatment for this syndrome. Treatment is supportive and symptomatic. Infants may require feeding tubes or special bottles to maintain sufficient nutrition. Surgery may correct strabismus. It may also improve limb and jaw deformities. Physical and speech therapy may improve motor skills and coordination. They also help to better control speaking and eating abilities. Plastic reconstructive surgery may be helpful in some individuals. Also, in a few cases, nerve and muscle transfers (*microvascular muscle transplant*) to the corners of the mouth have been performed to provide some ability to smile.

There is no cure for this syndrome. With proper care and treatment many individuals have normal life expectancy, in spite of the severe impairments that characterize the disorder.

## RESEARCH BEING DONE

The NINDS conducts and supports a broad range of research on neurogenetic disorders. These include Mobius syndrome. The goals of these studies are to develop improved techniques to diagnose, treat, and eventually cure these disorders.

**Research is continually being done to learn more about this problem.**

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