Evaluating facial nerve paralysis

Initial facial paralysis evaluation within 72 hours of onset

**Initial evaluation**
Perform a history and physical examination within 72 hours of symptom onset to exclude identifiable causes and to treat

**Assess for identifiable causes**
- Signs of stroke (e.g. “forehead sparing” lower facial paralysis)
- Atypical Bell’s presentation
- Brain tumor or mass lesion
- Parotid or neck mass
- Otologic (ear) origin

- **Urgent stroke evaluation**
  - Atypical slow onset beyond 72 hours
  - Recurrent or bilateral
  - Concurrent neurologic findings

- **Referral to Neurosurgery**
- **Referral to Head and Neck**
- **Urgent referral to Neurotology**
  - Traumatic cause
  - Otorrhea (ear drainage)
  - Concurrent hearing loss
  - Ramsay-Hunt Syndrome (Zoster)

- **If no identifiable causes**
  Diagnose Bell’s palsy (Idiopathic Unilateral Facial Paralysis):
  Bell’s palsy is defined as acute unilateral facial nerve paresis (weakness) or paralysis which develops over 1–3 days and is without an identifiable cause

- **Bell’s palsy initial treatment**
  - **Recommend** prescribing oral steroids within 72 hours of symptom onset for Bell’s palsy patients 16 years and older
    - Consider either prednisolone 50 mg for 10 days or prednisone 60 mg for 5 days with a 5-day taper
    - Consider oral steroids in pediatric patients younger than 16 years despite absence of high quality trials
    - Consider special dosing for pregnant, diabetic and elderly patients at the discretion of the provider
    - Efficacy of starting treatment after 72 hours is less clear and can be prescribed at the discretion of the provider
  - **Option** to prescribe oral antiviral therapy such as acyclovir or valacyclovir (in addition to oral steroids)

- See Bell’s palsy next steps (pg. 2)
- See page 2 for referral phone numbers.
Bell’s palsy next steps

Evaluate degree facial paralysis

Facial paresis
Weakness, some movement

Under 3 months since onset
Reassess for:
• Progression to complete paralysis
• New or worsening neurologic changes
• Impaired eye closure

Urgent referral to Neurology
Referral to Neurology
Implement eye protection

Incomplete recovery 3+ months since onset
Referral to UW Health Facial Nerve Clinic
Evaluation includes:
• Therapy
• Imaging
• Surgery
• Eye Care

Within 2 weeks of symptom onset
Urgent referral to Neurotology
Electrodiagnostic testing

Between 2 weeks and 3 months since onset
Reassess for:
• New or worsening neurologic changes
• Impaired eye closure

Complete facial paresis
No movement

Incomplete recovery 3+ months since onset
Referral to UW Health Facial Nerve Clinic
Evaluation includes:
• Therapy
• Imaging
• Surgery
• Eye Care

Eye care for facial paralysis

Protection for impaired eye closure
• Frequent use of lubricating ophthalmic drops such as “artificial tears”
• Frequent use of ophthalmic ointments at night
• Early referral to an eye doctor: uwhealth.org/eyes
• Use of wraparound sunglasses
• Use of moisture chamber at night
• Tape eye at night (with teaching)

For patients with complete paralysis, consider early referral.

Referral phone numbers

Facial Nerve Clinic ............. (608) 263-6190
Head and Neck Surgery .... (608) 263-6190
Neurology ...................... (608) 263-5442
Neurosurgery ................. (608) 263-7502
Neurotology ................... (608) 263-6190
Oculoplastic Surgery ......... (608) 265-7790
Ophthalmology ............... (608) 263-7171

For more information, visit uwhealth.org/facialnerve
Synkinesis evaluation and treatment

Although many patients with facial paralysis will see improvement, sometimes the facial muscles can “over-correct” causing the face to become tight, stiff or “heavy.” The eye may appear small. The crease between the side of the nose and corner of mouth (nasolabial fold) may seem deeper than the unaffected side. In some cases, the facial nerve can heal improperly causing muscles to contract out of sequence at the same time. For example, the eye may close during a smile or pucker, or the cheek may pull up when the eye closes. This improper movement, called synkinesis, can result in uncoordinated or distorted facial expression.

Evaluation of synkinesis
- Occurs in cases of delayed recovery after peripheral facial nerve injury
- Patients may describe facial tightness, pain, spasm or uncoordinated muscle movement
- Develops six months after onset of paralysis or later

Treatment of synkinesis
- Facial retraining may improve expression through muscle coordination
- Botulinum toxin has been shown to temporarily reduce facial spasm and improve synkinesis
- The UW Health Facial Nerve Clinic specializes in treatment of synkinesis

What to do before synkinesis develops
- Avoid maximum-effort exercises of facial muscles, which may worsen asymmetry
- Avoid electrical stimulation, which may increase abnormal movements
- Softly and gently stroke affected side of the face, as this may help brain’s sensory awareness of that side and promote more normal recovery

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