

TERMS

Peripheral facial paralysis: complete or partial unilateral paralysis of the facial musculature resulting from a functional disorder of the nervus facialis. In case of complete failure of the facial nerve, the facial musculature is completely paralysed, with the corner of the mouth hanging and inability to close the eye on the affected side. *Idiopathic peripheral facial paralysis (IPFP, Bell palsy)*: peripheral facial paralysis of which no cause can be found.

DIAGNOSTIC RECOMMENDATIONS**History***Symptoms consistent with IPFP*

- ★ Symptoms appeared within a short period of time (one to two days).
- ★ Altered taste, reduced saliva production, reduced tear secretion, hypersensitivity to sound, (mild) speech and/or swallowing problems.
- ★ Slight pain in or around the ear.

Symptoms not consistent with IPFP

- ★ *General*: symptoms occurring after a recent (cranial) trauma; gradual progressive failure (consistent with a tumour along the n. facialis or with a cholesteatoma); severe pain (consistent with herpes zoster, tumours, malignant otitis externa, otitis media).
- ★ *On an ENT level*: hearing loss, dizziness, ringing in the ears (consistent with otitis media, cholesteatoma, tumour, herpes zoster); otorrhea, fever (consistent with otitis media, malignant otitis externa).
- ★ *On a neurological level*: headache, neck stiffness (consistent with pathology of the central nervous system); reduction of strength or coordination of an arm and/or leg (consistent with pathology of the central nervous system); double vision, reduced facial feeling (consistent with various neurological conditions with failure of multiple cranial nerves); symptoms occurring after a tick bite with erythema migrans, pain in the joints, extremities or trunk, fever (consistent with Lyme borreliosis).

Check for relevant comorbidity on an internal, ENT and neurological level (increased risk of CVA, systemic diseases such as sarcoidosis, malignancies in the patient's history, multiple sclerosis).

Physical examination

Assess whether the facial paralysis has a *central* or a *peripheral* cause. With a central cause, only the lower half of the facial musculature is affected.

Assessment:

- ★ asymmetry of the face;
- ★ function of the facial musculature;
- ★ function of the other cranial nerves;
- ★ coordination and strength of arms and legs;
- ★ meningeal irritation (e.g. neck stiffness).

If *peripheral* facial paralysis is diagnosed, then examine:

- ★ the ear, the auditory canal and the mucous membranes of mouth and tongue for the presence of blisters;
- ★ the ear for signs of otitis media, otitis externa, the presence of a tumour or cholesteatoma;
- ★ the mouth, tonsil region and neck for the presence of a tumour;
- ★ the ability to close the eyelids and any conjunctival redness.

Evaluation

Make the diagnosis of IPFP if the facial paralysis is peripheral, occurred within a short time and if there are no signs of an underlying cause.

THERAPEUTIC RECOMMENDATIONS FOR IPFP**Education**

Explain that the patient has not been affected by a stroke, but that the function of the facial nerves has been affected by an unknown cause. The course is usually favourable.

Drug treatment

Corticosteroids increase the chance of complete recovery in all patients with IPFP:

- ★ administer prednisolone as quickly as possible and at the most one week after the symptoms have started, at a dose of 25 mg twice a day for 10 days.
- ★ be aware of any hyperglycaemic effects of corticosteroids; give stomach protection in case of simultaneous use of NSAIDs or acetylsalicylic acid.

Eye medication: if the eye cannot be closed completely, give an eye gel to prevent the cornea from drying out. For the night, provide a watch-glass bandage or an indifferent eye ointment (oculentum simplex) with an eye bandage.

FOLLOW-UPS

- ★ Asses the function of the facial musculature and the eye closure again after 2 days, as the clinical picture may worsen in the first days. Then during the first month, assess weekly until you see the onset of recovery. Depending on the degree and speed of recovery, reassessment can then take place every two to four weeks.
- ★ Check for any redness of the conjunctiva and assess the cornea epithelial and vision in the event of pain in the eye, a feeling like there is a foreign body in the eye, or photophobia.
- ★ Reconsider the diagnosis of IPFP in the event of an abnormal course and late occurrence of alarm symptoms.

Alarm symptoms

- ★ *General*: gradual, progressive paralysis of the facial musculature.
- ★ *ENT*: severe auricular/periauricular pain, otorrhea and/or signs of otitis, hearing loss, ringing in the ears, balance problems, vesicles in the auditory canal or in the mouth.
- ★ *Neurological*: loss of strength or lack of coordination of an arm and/or leg, headache, neck stiffness, failure of multiple cranial nerves, severe speech and/or swallowing problems, suspicion of Lyme borreliosis with pain in the joints, extremities or trunk, and/or fever.

REFERRAL

- ★ Refer children younger than 15 years with facial paralysis to a paediatrician.
- ★ Refer to a neurologist:
 - if there is a suspicion of a central cause of the facial paralysis;
 - if there is a failure of multiple cranial nerves;
 - if there are neurological alarm symptoms.
- ★ Refer to an ENT physician:
 - if a cause of the facial paralysis cannot be sufficiently ruled out;
 - if there are ENT alarm symptoms;
 - if recovery has not started within one month or in the event of insufficient recovery after three months.
- ★ Refer to ophthalmologist as an emergency in the event of redness, pain in the eye and reduced vision despite adequate treatment.