



## Facial nerve paresis

General:

The acute facial paresis is a polyetiologically caused complete or incomplete motor and sensory neuropathy, occurring on one or both sides of the face and neck muscles (innervated by the 7<sup>th</sup> cranial nerve) as well as sensorically by taste qualities of the tongue on the respective affected side. Furthermore a disturbance of tear secretion as well as hearing disturbances such as hyperacusis can be observed (lost stapedius reflex). Bell's paralysis: acute isolated one-sided peripheral facial nerve paresis of unknown cause (idiopathic facial paralysis). Ramsay Hunt syndrome: due to Herpes zoster oticus (VZV) or Herpes zoster (VZV).

Examinations: CBC, CRP, ESR, antibodies or PCR (borreliosis, VZV, HSV), CSF diagnostics (specific antibody indices, see below CSF diagnostics).

Differential diagnostics facial nerve paresis:

## Causes:

| Infections                                | Virus infections: VZV (Herpes zoster) or HSV-1.   |
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|   | Rare viral infections: EBV, CMV, Parvo-B19, HIV, enteroviruses, mumps v., measles v., rubella virus, adeno and influenza viruses.   |
|   | Bacterial infections: acute otitis media, mastoiditis, cholesteatoma, dentogenic infections, meningitis and sepsis, Borrelia burgdorferi.   |
|   | In 20-40% of FP in children borreliae are causative. In approx. 5-15% of<br>borreliosis FP is observed. In 30-50% of patients with CNS borreliosis<br>FP occurs.Very rare pathogens: leptospirae, Mycoplasma pneumoniae,<br>Bartonella henselae, rickettsiae. |
| Noninfectious<br>inflammatory<br>diseases | Kawasaki syndrome, systemic Lupus erythematodes, inflammatory pseudotumor of N. facialis, sarcoidosis, mostly on both sides, Morbus Still, amyloidosis.   |
| Neoplasia                                 | Parotid tumor, neurinoma, meningioma, rhabdomyosarcoma (middle ear), Morbus Paget, leukemia, metastases of other neoplasias.  |
| Traumata                                  | Birth trauma, cranial trauma, ear operations, barotrauma.   |

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| Other causes | Pregnancy: in the context of hypertension or preeclampsia.<br>Hyperthyroidism, diabetes mellitus, hypertension, hypertriglyceridemia,<br>hyperlipoproteinemia, infantile cortical hyperostosis (Caffey Silverman<br>syndrome), hemophilia, familial recurring facial paralysis, cyclosporine<br>side effects. |
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For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit http://www.fml-dubai.com/parameter-listings/

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