

# Symptoms and Causes of Bell's Palsy

Supervised by: Dr. Osama Othman Alabeede

Prepared by: Omar Yousef Alsaiti 2591

LIBYAN INTERNATIONAL MEDICAL UNIVERSITY  
FACULTY OF APPLIED MEDICAL SCIENCES



## Introduction

Bell's palsy is the most frequent acute mononeuropathy, or condition affecting a single nerve, and the most prevalent diagnosis related with facial nerve weakness/paralysis. It is named after Scottish anatomist Sir Charles Bell.

Bell's palsy has a rapid onset (<72 hours), can affect men, women, and children, but is more frequent in people aged 15 to 45, individuals with diabetes, upper respiratory illnesses, or impaired immune systems, and women who are pregnant.<sup>1</sup> The condition causes a partial or complete inability to move the affected side of the face's facial muscles voluntarily. There is currently no known etiology. Strokes, brain tumors, tumors of the parotid gland or infratemporal fossa, cancer of the facial nerve, and systemic and infectious disorders like zoster, sarcoidosis, and Lyme disease are all possible causes of facial paralysis.<sup>2</sup> The facial paresis/paralysis can produce substantial transient oral incompetence as well as an inability to seal the eyelid, which can lead to eye damage. Bell's palsy is diagnosed when no other medical cause of facial weakness can be found.<sup>3</sup>

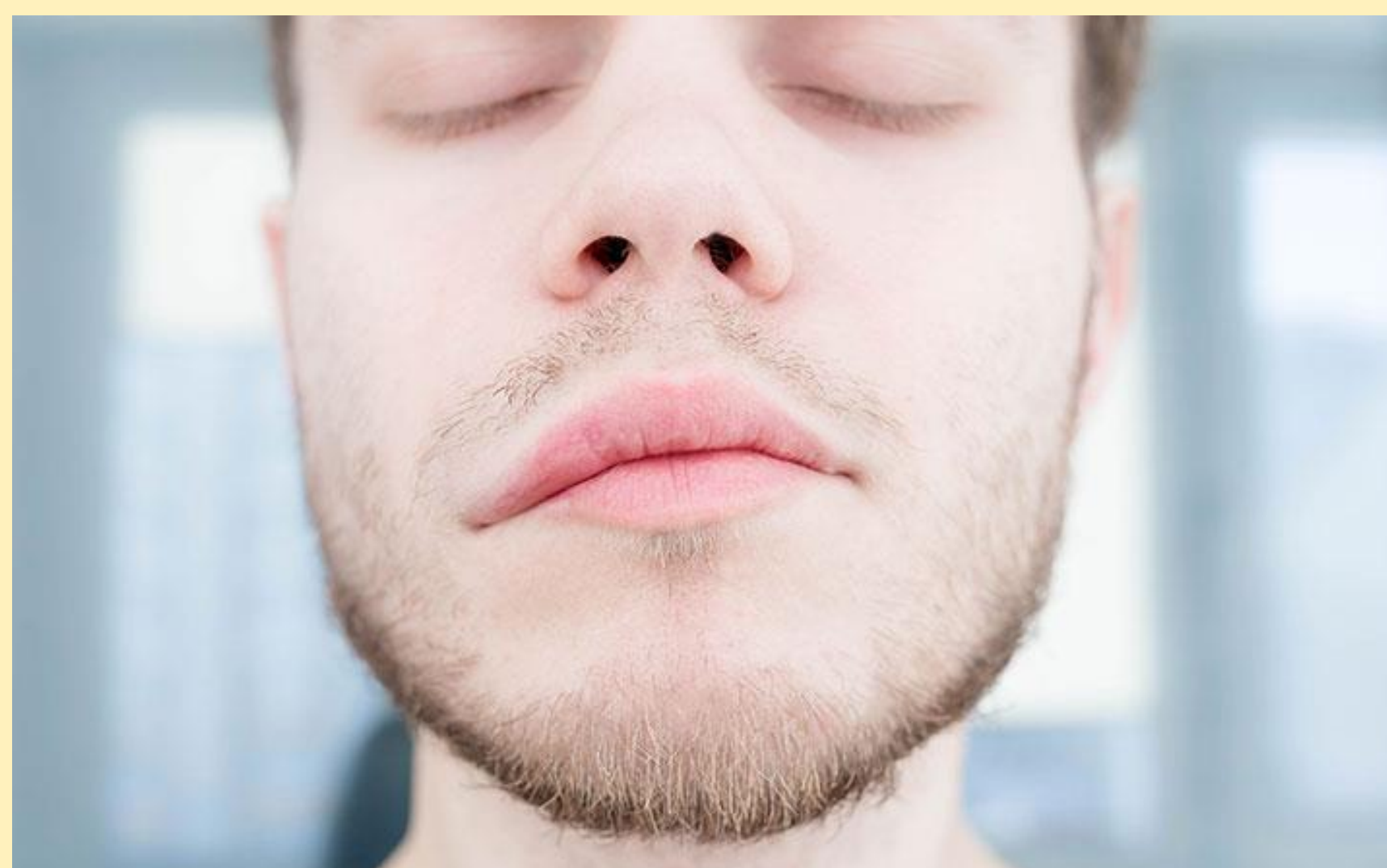


Figure 1

## Symptoms

- Disordered movement of the muscles that control facial expressions, such as smiling, squinting, blinking, or closing the eyelid
- Loss of feeling in the face
- Headache
- Tearing
- Drooling
- Loss of the sense of taste on the front two-thirds of the tongue
- Hypersensitivity to sound in the affected ear (hyperacusis)
- Inability to close the eye on the affected side of the face.

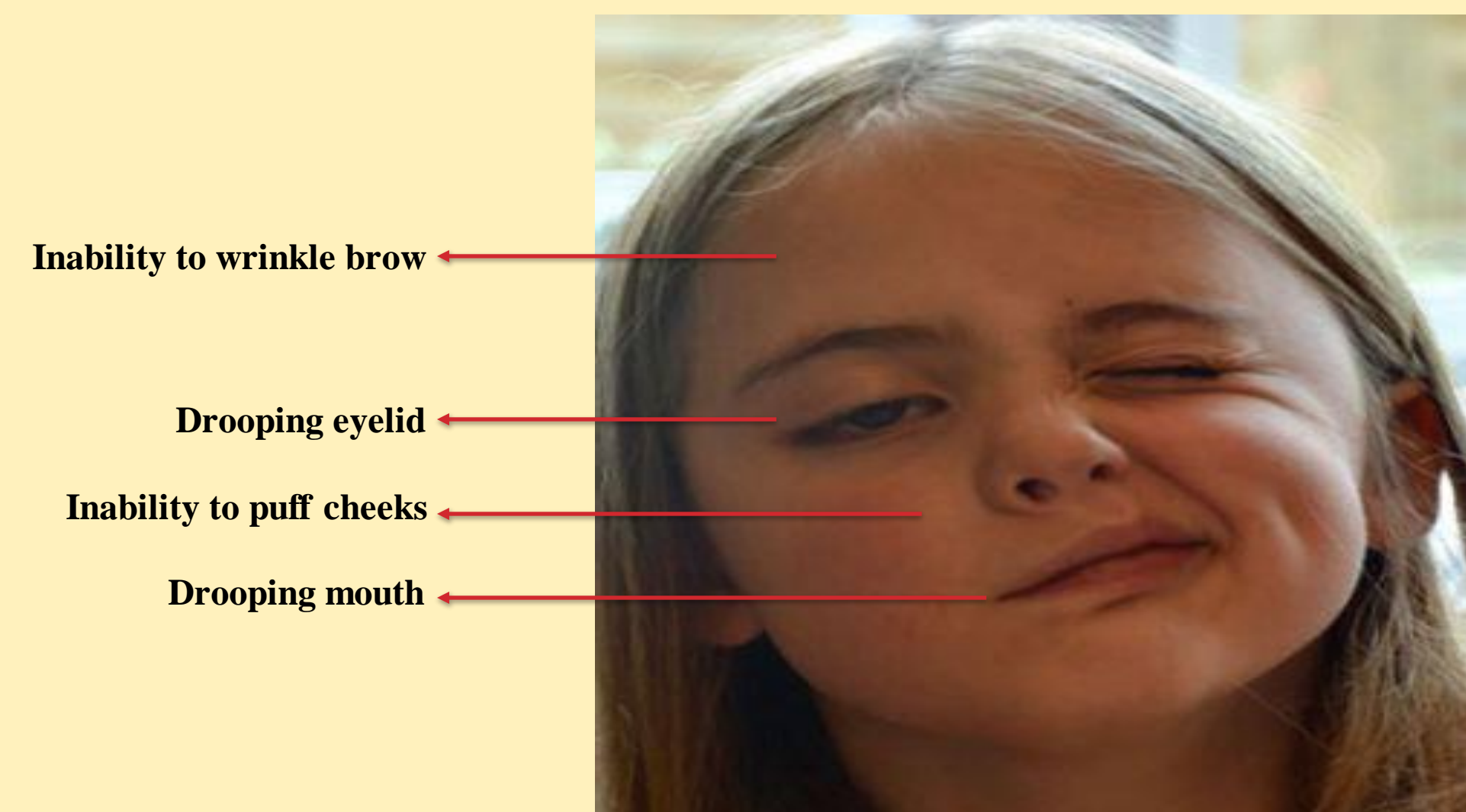


Figure 2

## Treatment

### Medications include:

- Corticosteroids, such as prednisone can reduce the swelling of the facial nerve.
- Antiviral drugs, such as valacyclovir (Valtrex) or acyclovir (Zovirax).
- Over-The-Counter pain relievers. Aspirin, ibuprofen.

**Physical therapy:** help to increase muscle strength.

**Surgery:** Today, decompression surgery isn't recommended.

## Causes

- Idiopathic (most common cause of peripheral facial nerve palsy): Acute idiopathic peripheral facial palsy is also known as Bell palsy.
- Secondary:
  - ✓ Trauma (e.g., temporal bone fracture)
  - ✓ Infection:
    - Herpes zoster (Ramsay Hunt syndrome)
    - Borreliosis (Lyme disease)
    - HSV Reactivation
    - HIV
  - ✓ Tumors (esp. parotid gland tumors)
  - ✓ Pregnancy
  - ✓ Diabetes mellitus
  - ✓ Guillain-Barré syndrome
  - ✓ Sarcoidosis (Heerfordt syndrome)
  - ✓ Amyloidosis
  - ✓ Stroke.

## References

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