NEUROLOGY

BELL’S PALSY

- Acute, unilateral, idiopathic, partial or complete facial nerve paralysis (affects the eyelids, causing an impairment of blinking).
- Cause unclear (possible association Herpes virus)
- 20-40/100,00 annual incidence UK, peak age 15-40 (usually 15-60), but can occur at any age.
- Most show signs of recovery within 2-3 weeks. Most recover completely.
- Early treatment with oral corticosteroids improves prognosis.

RED FLAGS

- Gradual onset or bilateral facial palsy.
- Involvement of other cranial nerves.
- Evidence of asymmetry of the oropharynx and ipsilateral tonsil or swelling in front of/below ear may indicate a parotid tumour.
- SEVERE pain, vesicles in ear or mouth, hearing loss, imbalance suggest RAMSAY HUNT syndrome and require specialist assessment (ENT or neurology)
- Hearing impairment, discharge, bleeding, dizziness, vertigo, disorder of balance, pain, headaches, or tinnitus are symptomatic of cholesteatoma.
- Evidence of polyposis or granulations are suggestive of malignant otitis externa.
- A rash on the limbs or trunk following a tick bite may indicate Lyme disease.
- CHILDREN more likely to have underlying cause (but excellent prognosis> 90% recovery)

DIAGNOSIS

- UNILATERAL LOWER MOTOR NEURONE SIGNS
  - Isolated FACIAL nerve palsy
  - ALL facial muscles affected
  - UMN lesion preserves brow wrinkling, blinking, eye closure
- Maximum facial weakness develops within 2 days (NB may be partial initially)
- Earache, pain behind the ear, aural fullness, or facial pain, may precede the palsy.
- Severe pain might indicate Ramsay Hunt syndrome. This is caused by herpes zoster and is associated with a painful rash and herpetic vesicles.
- Loss of taste of the anterior two-thirds of the tongue (on the same side as the facial weakness) may occur.
- Note – there is increased incidence in pregnancy

INVESTIGATIONS- none routinely advised, but consider if clinically relevant to differential diagnoses

PRIMARY CARE MANAGEMENT

- Patient education
  - PROGNOSIS GOOD- most make full recovery in 9 months
- **70-80%** recover spontaneously a few weeks to a few months after onset, 20-30% have delayed recovery- 1/6 persistent facial weakness, tightness, unwanted movements.
- **Poorer outcomes in the elderly, complete paralysis at onset, Ramsay Hunt.**
- Address associated depression/anxiety- never proportionate to degree of physical impairment
- EYE PROTECTION-Eye must be kept lubricated and consider nocturnal taping
- Can develop synkinesis (abnormal movements) in face as a sign of reinnervation

### TREATMENT
- **Oral PREDNISOLONE – most effective < 72 hrs onset of symptoms**
  - Some evidence up to 7 days
  - BEST EVIDENCE: 50 mg DAILY 10 DAYS (OR 1MG/KG)
  - Antiviral treatments are not generally recommended as evidence poor, either alone or in combination with prednisolone.
  - Some evidence for use with steroids in Ramsay Hunt syndrome- d/w ENT or neurology

### REFERRAL
- **RED FLAGS** as above
- Refer to **neurology** or to **ear, nose, and throat (ENT)** if there is:
  - Any doubt regarding the diagnosis.
  - Additional cranial nerve palsies (25% face feels numb but no loss pin prick, does not indicate 5th CN involvement)
  - Recurrent Bell’s palsy.
  - Bilateral Bell’s palsy.
- If the cornea remains exposed after attempting to close the eyelid, refer urgently to **ophthalmology**
- Consider refer to **plastic surgery** if no signs of recovery after 3 months for physio/possible facial reanimation surgery. Early intervention has better outcomes.
- Physiotherapy- some evidence supports ‘facial training’ to improve facial motor function, reduce tightness, prevent contractures, and reduce unwanted movements. Facial physiotherapists can be accessed through the plastic surgery facial palsy service.

### REFERENCES
- [http://cks.nice.org.uk/bells-palsy](http://cks.nice.org.uk/bells-palsy)
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- [http://dtb.bmj.com/content/early/2013/12/05/dtb.2013.12.0222.abstract](http://dtb.bmj.com/content/early/2013/12/05/dtb.2013.12.0222.abstract)

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