Nationwide learning

Answer discussion Case 115 Two cases of facial asymmetry

Approach to facial palsy

14th Sep 2018, 9 PM
Session will start soon .....please wait
Bell's Palsy

Bell palsy presents with paralysis of facial muscles, generally unilateral, due to acute lower motor neuron weakness of cranial nerve VII (facial nerve) with no detectable cause.
Facial nerve palsy

**Lower motor neurone** (forehead muscles affected)
- Idiopathic (59-70%) Bell’s palsy
- Traumatic (10-23%)
  - Temporal bone fracture
  - Latrogenic (post-surgical)
  - Sharp/blunt facial trauma
  - Birth canal trauma
- Viral (4.5-7%)
  - Herpes zoster virus (Ramsay Hunt syndrome)
- Neoplastic (2.2-5%)
  - Acoustic neuroma
  - Parotid malignancy

**Upper motor neurone** (forehead muscles not affected)
- For example, cortical or brainstem infarct, intracranial tumour
- Other (3-5%)
  - Acute or chronic otitis media
  - Malignant otitis externa
  - Lyme disease
  - Misdiagnosed†
Clinical presentation

- Typically develop over a period of 48 hours or less
- Preceded by feeling of fullness in ear and otalgia
- Forehead on the affected side
- Diagnosis based on history and physical examination
- House-Brackmann Scale
Clinical presentation

• Hyperacusis
• Ageusia
• Impaired lacrimation and ocular dryness
• Difficulty closing the eye on the affected side
• Difficulty drinking and eating
• Drooling
## Anatomical localisation of VII nerve palsy

<table>
<thead>
<tr>
<th>Anatomical site</th>
<th>Key clinical features</th>
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| Stylomastoid foramen             | paralyzes all muscles of facial expression  
                                         Bell’s phenomenon  
                                         Food collects between the teeth and lips  
                                         saliva may dribble from the corner of the mouth |
| Middle-ear portion               | taste is lost over the anterior two-thirds of the tongue on the same side  
                                         Hyperacusis                                              |
| Internal auditory meatus         | deafness, tinnitus, or dizziness                                                      |
| Intra pontine lesions            | Abducens nucleus (VI nerve) corticospinal and sensory tracts.                         |
Risk factors

- Age
- peak incidence in fifth decade
- Pregnant women have 3.3 times higher incidence
- Diabetes
- Winter
Red flag signs in facial palsy

- Gradual onset
- Headache, ear symptoms
- Tick bite rash
- Athralgia
- Bilateral
- Other neurological signs
Differential diagnosis

- CVA
- Otitis media
- Lyme disease
- GBS, Sarcoidosis
- Neoplasia
Red flags in facial nerve palsy

- Pain in facial nerve distribution
- Paresis of limbs
- Paresthesia of face and limb
- Postural imbalance
- Ipsilateral sensorineural hearing loss
- Absence of the corneal reflex
- Gradual onset and involvement of other cranial nerves
- Regional cancer
- Persistent facial palsy beyond 6 months
- Pediatric patient
Treatment of Bells palsy

- Antiviral use for treatment of Bell palsy is controversial and not currently supported by evidence
- Prednisolone dose of 60 mg PO per day for 5 days, followed by a 5-day taper or 25 mg PO twice daily for 10 days
- Lubricants/artificial tears
- Facial exercises
- Neuromuscular retraining
- 85% of patients recover function within 3 weeks
Risk factors for incomplete recovery

• Diabetes
• Pregnancy
• Post auricular pain
• Delayed return of function (>3 weeks from onset)
• Age (over 60 have worse prognosis)
• Lack of physical therapy
Outcome of the case 115 Case A
HISTOPATHOLOGY REPORT

SPECIMEN: Left superficial parotidectomy.

GROSS: Received parotidectomy specimen measuring 6 x 4.2 x 1cm. Cut section shows circumscribed greyish white solid mass measuring 3.5 x 4 x 1cm.

MICROSCOPIC EXAMINATION: (A to E) Multiple sections studied show a tumour composed of cuboidal to columnar cells arranged in follicular, microcystic, and papillary cystic pattern. Cells show mild anisonucleosis & have abundant eosinophilic granular cytoplasm. At places the papillary formation with hobnailing of nuclei noted. (E). The lumina of follicles contain foamy macrophages & proteinaceous secretions. Adjacent salivary gland is unremarkable.

Impression: Acinic cell carcinoma (papillary-cystic variant)
Case A

What is the most likely cause of facial asymmetry in above lady

- Left lower motor neuron facial palsy √
- Left Upper motor neuron facial palsy
- Right upper motor neuron facial palsy
- Right Lower motor neuron facial palsy
- other √

What could be red flags signs in above patient (case B)?

- Vertigo √
- hearing loss √
- Headache √
- Acute onset √
- Slow and progressive course √
- history of tick bite √
- Absence of other neurological features

Absent corneal reflex
• Case 115

• Case A – Left old partially recovered Bells palsy. Incidental parotid tumor on same side but not causing facial palsy

• Case B – Left LMN facial palsy
Unilateral Vs Bilateral facial palsy
How to spot old Bells palsy

- Diffuse contraction of facial muscles
- Palpebral fissure becomes narrowed
- Nasolabial fold deepens.
- Attempts to move one group of facial muscles may result in contraction of all
- Closure of the lids may cause a retraction of the mouth,
- crocodile tears
- jaw-winking
Clinical pearls

• BELL’S PALSY - A DIAGNOSIS OF EXCLUSION
• Watch out for red flags
• Know how to diagnose old Bell’s pasly

Thank you!