

+ 30

$\frac{117}{18} = 6.5$

Excellent!

Content (30 pts total)

6-point scale used to evaluate each content category.

- 2 pts = cursory treatment of the topic, missing numerous pieces of key information, or numerous, significant errors present
- 4 pts = Topic is addressed in moderate detail but missing 1-2 pieces of key information, or several errors are present
- 6 pts = Topic is well developed, covering key information, no significant errors present

Characteristics of the Disease

What are the hallmark characteristics?

- ⑥ Describe various types as appropriate
Incidence/Prevalence (include age/gender/race/ethnicity variants as appropriate)

Symptoms

Hearing loss (onset, laterality, situations of particular difficulty)

Tinnitus? Anything characteristic about the tinnitus

- ⑥ Vertigo?
Other symptoms, including non-auditory

Audiologic characteristics

Hearing loss type, severity, configuration, progression

Characteristic speech audiometry, immittance results

- ⑥ Any special tests used? Expect results.
Which of the diagnostic results are most predictive of this disorder?

Otologic findings

What are the medical characteristics?

What is the ENT or other physician looking for in making a diagnosis?

- ⑥ Other diseases/disorders with which it might be confused?
Any medical tests/procedures that are particularly sensitive to this disorder?

Treatment

Medication?

Surgery? Include a *brief* summary of what the surgery is.

- ⑥ Prevention?
Communication/Audiology?

+17

Form (18 pts total)

Variable-point scale for each category

Organization

- 6
- 2 pts: The paper is disorganized. Topics do not follow logically. The reader is often confused regarding the flow of information
 - 4 pts: The paper is generally organized with a mostly logical flow. However, the topic flow is sometimes awkward or confusing.
 - 6 pts: The paper is well organized, with a logical, clear, and easily understood presentation of information.

Writing

- 5
- 2 pts: The paper is hard to read/understand. Sentence structure is difficult to understand. The reader is often confused about the writer's intention
 - 4 pts: The paper is relatively easy to read/understand. However, poor sentence structure or awkward word choices may limit the ease of reading in several sections *slightly confusing, wording in a couple of*
 - 6 pts: The paper is easy to read and is easy to understand. Sentence structure and word choice are appropriate. *places*

Referencing Style - *see comments on last page! much improved*

- 3
- 1 pt: Numerous (>5) errors in use of APA style for references and within-text citations
 - 2 pts: Several (2-4) errors in use of APA style for references and within-text citations
 - 3 pts: Few (1-1) errors in use of APA style for references and within-text citations

Mechanics

- 3
- 1 pt: Numerous (> 15) spelling, punctuation, or grammatical errors
 - 2 pts: Frequent (5-15) spelling, punctuation, or grammatical errors
 - 3 pts: Few (< 5) spelling, punctuation, or grammatical errors

Bell's Palsy: A Clinical Overview

University of Kansas

Although audiologists are sometimes characterized as only dealing with patients who have hearing loss, the full audiologic test battery extends much further than fitting hearing aids. The following paper discusses Bell's palsy, a disorder which is not indicated by hearing loss, but can have audiologic testing done to assess and rule out other disorders.

Characteristics of the Disease

Bell's palsy is predominately characterized by an acute, unilateral paralysis or paresis of the face consistent with peripheral nerve dysfunction (Lalwani, 2008). The disease affects men and women equally and can occur at any age of the individual. While the mean age of identification is 40 years, the highest rate of occurrence has been identified in people over 70 years old (Gilden, 2004). Additionally, Bell's palsy can be identified at any time of the year (Ropper & Brown, 2005).

Some research has shown a high incidence of Bell's palsy in women during pregnancy; especially in the last two weeks prior to birth and in the two weeks postpartum, but there is a lack of research to back up these statistics (Ropper & Brown, 2005).

The paralysis will occur rapidly, usually in less than 48 hours, resulting from damage to facial nerve conduction within the temporal bone (Lalwani, 2008). Bell's palsy can be confused with several other disorders causing facial paralysis that will be discussed later in this paper (Ropper & Brown, 2005).

Symptoms

There is no hearing loss associated with Bell's palsy but there have been accounts of hyperacusis caused by paralysis of the stapedius muscle, dampening the vibration of the

The paralysis causes the dampening or do you mean there is an absence in the dampening (i.e. an absent stapedius reflex?)

ossicles on the affected side (Gilden, 2004). This hyperacusis causes the patient to report sounds as being abnormally loud on the side of the affected muscle (Gilden, 2004).

A feeling of pain or numbness of the ear, mid-face, and tongue on the affected side can occur, coinciding with loss of taste on the anterior 2/3 of the tongue (Lalwani, 2008). Inability of a patient to effectively close his or her eyes is due to denervation of the obicularis oculi muscles, while denervation of the risorius muscle leads to lack of movement of the mouth on the affected side (Gilden, 2004). Damage to the parasympathetic fibers which control lacrimation also can ^{occur} result in patients with Bell's palsy, making it difficult for them to produce tears (Gilden, 2004).

Audiologic Characteristics

In a study by Korczyn (1972), 151 patients who were diagnosed with Bell's palsy had audiometric tests performed to see if other otologic problems may be associated with the condition (~~Korczyn, 1972~~). His results showed that 40.4 % of the patients experienced some sort of pain behind the ear on the side of paralysis, while only 8 % reported symptoms of

hyperacusis. Although audiograms showed a small percentage with high frequency losses, 7 %, and some patients reported tinnitus, 3%, these were not statistically significant ^{and suggest that} to rule that involvement of the auditory system in patients with Bell's palsy ^{is rare} ~~is anything more than rare~~ _{awkward} (Korczyn, 1972).

Rosen and Sellers (1980) studied the affects of Bell's palsy and facial nerve paralysis in acoutstic reflex testing. They found absent reflexes in 90% of 400 patients tested when the probe was in the ear on side with facial weakness (~~Rosen & Sellers, 1980~~). It was noted that the reflex would return before any other feature of facial nerve function, and a reliable relationship

*you say
the ref
at the
beginning
of the sentence.
you don't
need to
repeat
it here.*

don't need it here b/c clear to which study you are referring

between reflex return and facial movement was shown. However, the percentage of facial recovery could not be determined relative to the time that the reflex returned (Rosen & Sellars, 1980).

→ I don't exactly know what you mean here.

A case presented by Silman et al. (1988) showed audiologic test findings in a patient with Bell's palsy. The patient, a fifty-five year old male with left unilateral facial paralysis, showed air and bone conduction testing within normal limits. Speech recognition thresholds were 10 dB HL bilaterally and word recognition was 96% bilaterally. Immitance results showed tympanometry testing within normal limits, with absent left ipsilateral and absent right contralateral acoustic reflexes (Silman et al., 1988).

nice touch & very appropriate internal citation.

Otologic Findings

Unilateral facial paralysis is one of the main indicators of Bell's palsy. However, because there are many disorders ^{that} which may cause unilateral facial paralysis, a detailed case history and several tests can be performed for differential diagnosis (Gilden, 2004). Figuring out whether the paralysis is due to a central nervous system or a peripheral nervous system problem is the first step in diagnosing Bell's palsy (Gilden, 2004). The physician will ask the patient questions like, "show me your teeth," and "close your eyes," to determine how much of the face has been affected. In cases where facial weakness only includes the mouth with both furrows on the forehead intact, the site of lesion would be central, occurring above the level of the seventh cranial nerve. When the affected side has both mouth and ipsilateral furrow weakness, the lesion is peripheral, which is the case for Bell's palsy (Gilden, 2004).

Physicians will rarely use MRI in diagnosing Bell's palsy. If they do, the irregularity most seen is contrast augmentation of the distal intracanalicular and labyrinthine sections of the

facial nerve (Gilden, 2004). Electroneurography can be used by physicians to determine the degree of facial paralysis. Electroneurography uses a recording technique with an electrically evoked stimulus to measure the action potential of the facial muscle, comparing it to the side which is intact. This test, along with the House-Brackmann scale, can predict the degree of recovery that a patient can expect (Gilden, 2004).

A detailed case history with symptoms such as affected salivary and lacrimal secretions, loss of taste on the anterior 2/3 of the tongue, or hyperacusis will also help the physician in his or her differential diagnosis (Gilden, 2004). Lyme disease, HIV virus, rare cases of chicken pox, Ramsay Hunt syndrome, tumors of the parotid gland, acoustic neuromas, diabetes, neurofibromas and glomus jugulare tumors can all present symptoms of facial paralysis (Ropper & Brown, 2005). When no identifiable cause of facial paralysis is evident, which is the case 60-70% of the time, the clinical diagnosis becomes Bell's palsy (Lalwani, 2008).

Some research has shown that the Herpes Simplex Virus ^(HSV) type 1 may be an etiologic agent causing Bell's palsy. ^{Victor & Ropper (2005)} Some cases have identified HSV type 1 in endoneurial fluid ^{in some cases.} surrounding the seventh nerve ^(Victor & Ropper, 2005). These same researchers who have found HSV type 1 to be an etiologic agent, inoculated the virus into the ears of mice, resulting in unilateral facial paralysis ^(Victor & Ropper, 2005).

I am not taking off for now, but this would be a way to get around having to use the same electric agent 2 consecutive times

Treatment

Protecting the eye during sleep and daytime activities is important for Bell's palsy patients. Because it is difficult to close the eye, an eye patch can be worn. When a decrease in tearing occurs, eye drops can also be administered throughout the day (Ropper & Brown, 2005). Seventy-one percent of patients will show recovery of the facial muscles, with 84%

attaining full normal function. Those who do not recover fully can receive further medical treatment (Gilden, 2004).

that's a mouthful!

Sullivan et al. (2007), conducted a double-blind, placebo-controlled, randomized, factorial trial involving those who had Bell's palsy. The patients were assigned a 10-day treatment with prednisolone, acyclovir, both agents or a placebo and assessed with the House-Brackman scale (Sullivan et al., 2007). ^{Sullivan et al.} The study found that those treated early with prednisolone alone had significant improvement in the chances of full recovery with no additional evidence that combining ^{prednisolone with} acyclovir or ^{administering} acyclovir alone increased recovery (Sullivan et al., 2007). Glucocorticoids have also been shown to be affective in improving facial weakness, with some cases increasing total recovery by close to 20% (Gilden, 2004).

don't need this here b/c clear you are talking abt this study

Those patients who never attain full recovery can be candidates for surgery, although this treatment remains controversial (Gilden, 2004). The surgery is a decompression of the facial nerve at its narrowest point which is the meatal foramen. The surgery can be dangerous because permanent unilateral deafness has been estimated to occur anywhere between 1-15% of cases (Gilden, 2004).

Understanding disorders such as Bell's palsy which may not necessarily present hearing loss, but have other audiologic symptoms is essential for the clinical audiologist today.

Performing audiologic assessments, such as immittance testing, has been shown to be important in monitoring seventh nerve function and used in differential diagnoses when other cranial nerve damage exists.

*Excellent paper!
Much improved
use of references!
You may have more than you realize!
Some places and I made a couple of suggestions of swaps to cut out some (I did not take off pts. working)
You present a very thorough & interesting overview
BP*

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