The Patient with a Sensory Disability

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Types of Sensory Disability

- Two types:
  - Vision Impairment
  - Hearing Impairment
- Main change in appointment is communication
- Aids available such as:
  - qualified interpreters, assistive listening headsets, paper/pin, text/telephone devices for hearing impairment
  - readers, Braille, large printed materials for vision impairment (touch is essential for blind patient)

Visual Impairment Overview

- Often blindness is secondary to a primary condition
- Only approximately 3% of legally blind people are totally blind
- The term “legally blind” is a legal term NOT a medical term.
Causes of Blindness

- Leading causes:
  - Diabetic retinopathy
  - Age-related macular degeneration
  - Senile cataracts
  - Glaucoma
  - Vascular disease
  - Trauma & infections

Treatment Plan for the Blind

- Pt. relies on tone of voice
  - Keep tone low and consistent
- Guide patient to dental chair
  - Don’t push or pull patient (Fig. 56-1 pg. 940 Wilkins)
- Give warnings of potential hazards in walkway
- Tell patient of any changes in setting
- Explain movements (leaving and returning to area)
- Don’t speak or touch a guide dog

Treatment Plan for the Blind

- Describe each step prior to beginning
- Prevent repetitive phrases during appointment
- Provide clear instructions
- Remember – this patient relies on touch, smell, sound
Things to Remember

- Light sensitivity is common with vision conditions
- Patients with glaucoma have no peripheral vision so speak directly in front of them
- Procedures can be adapted without mention of sight to patient

Hearing Impairment

- Hearing impairment-defective but still functional hearing
  - “Hard of hearing”
  - “Hearing loss”
- Deaf-unable to understand speech
- 28 million deaf and hearing impaired persons in United States; 66% 65 or older
- Hearing loss can be associated with other disabling conditions
  - Cleft Palate (90 percent)
  - Cerebral Palsy (20 percent)
  - Down Syndrome (70 percent)

Causes of Hearing Impairment

<table>
<thead>
<tr>
<th>Prenatal or Congenital</th>
<th>Acquired</th>
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<tbody>
<tr>
<td>Genetic Defects</td>
<td>Infections</td>
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<tr>
<td>Prenatal infections</td>
<td>Trauma</td>
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<td>Drugs</td>
<td>Chronic use of certain drugs</td>
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<td>Environmental noise</td>
<td>Environmental-Noise</td>
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<td>Rh incompatibility</td>
<td>Pathology-stroke or brain tumor</td>
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<td>Birth trauma</td>
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Signs and Symptoms
- May read lips or focus attention on non verbal expressions
- Speech altered
- Turn head to one side if unilateral loss
- Frequently asks to repeat phrases
- Failed response to conversation or lack of attention
- Gives unexpected answer unrelated to question

Oral Manifestations
- Not generally seen with impairment unless associated with conditions—e.g. rubella syndrome
- Bruxism—may occur in chronic cases, damages jaws and can cause hearing loss due to middle ear muscle attachment
- Rubella or Prematurity
  - Enamel dysplasia
- Cleft palates

Types of Hearing Loss
- Conductive Hearing loss
  - Outer/Middle ear involvement of conduction pathway to inner ear
- Sensorineural Hearing loss
  - Damage sensory hair cells or nerves of inner ear
- Mixed Hearing loss
  - Conduction and sensorineural
- Central Hearing loss
  - Damage of nerves or nuclei of CNS in brain or pathways to brain
Treatment

- Persons with hearing impairment may learn certain ways of communication
- Need to be aware of different types of communication
  1. American Sign Language (ASL)
  2. Fingerspelling
  3. Oral Communication—combination of speech, residual hearing and speech reading
  4. Speechreading
  5. Writing

Dental Hygiene Care and Modifications

- Hearing Aid
  - Touching hearing aid when on
  - Power driven dental instruments/power driven scalers
- Partial Hearing Ability
  - Speak clearly/distinctly
- Speech reader
  - Patient’s attention
  - Speak normal tone
  - Gestures
- Sign language
  - Rapport and reduces stress

Dental Hygiene Care and Modifications

- Consider patient’s individual circumstances
- Determine mode of communication
- Plan in advanced gestures/signals
- If ASL or unable to fully communicate—writing on paper preferred method
- Always consider patient’s feelings—e.g., frustration, anger, or embarrassment
- Telecommunication Relay Service (TRS)
References: