

# Sudden Sensorineural Hearing Loss & Audiologic Management

Sudden sensorineural hearing loss (SSNHL) is defined as an unexplained sudden drop in hearing in one ear that develops over a few hours (up to three days) in an otherwise healthy patient<sup>1</sup>. Prompt identification is critical in order to provide appropriate management.

## Facts & Stats

- Most patients will notice hearing loss when they first wake up in the morning. Others notice a loud, alarming “pop” just before their hearing disappears<sup>2</sup>

- In the majority of cases the hearing loss is unilateral.<sup>3</sup> Less than 2% develop sudden bilateral hearing loss<sup>4</sup>

- The cause of SSNHL can be found in only 10% to 15% of patients.<sup>5</sup> Most are considered idiopathic.<sup>6</sup>

- Numerous etiologies can lead to SSNHL, including infectious, inflammatory, neoplastic, and metabolic abnormalities. However, viral infection is claimed to be the basis for about 60% of all cases, including influenza type B, CMV<sup>7</sup>, measles, mumps, rubella, varicella-zoster, herpes-1, and infectious mononucleosis<sup>3</sup>

- The estimated yearly incidence of SSNHL is 5 to 20 cases per 100,000 persons, although a significant number of cases go unreported<sup>8</sup>

- SSNHL occurs across the entire age spectrum with equal prevalence in men and women, but most patients are between 50 to 60 years of age<sup>4</sup>

- 70% of SSNHL patients also suffer from tinnitus,<sup>9</sup> and vertigo occurs in 20 to 60% of patients<sup>10</sup>

- Approximately one-third of SSNHL patients recover completely, one-third recover partially, and about one-third continue with hearing loss, regardless of the treatment protocol<sup>11</sup>

- High doses of steroids are often used to treat patients with SSNHL. The best outcome is achieved when steroids are administered as quickly as possible after the onset of the drop in hearing. Avoiding excessive noise exposure is also beneficial<sup>4</sup>

# What You Can Do to Help in this Medical Emergency

A sudden loss of hearing—like a sudden loss of vision—is a medical emergency that requires urgent care. Because the chance of recovery is greater if the hearing loss is identified early, collaboration among the primary care Physician, Otolaryngologist and an Audiologist is key in the early diagnosis and treatment of patients with SSNHL.<sup>12</sup> When SSNHL is suspected, Otologic and Audiologic Assessment should be scheduled as soon as possible.

While some patients recover spontaneously or in response to medical treatment, many others are left with a degree of hearing loss and tinnitus with an associated handicap. Therefore, it is vital that management of patients with SSNHL include Audiological Rehabilitation.<sup>12</sup>

The resulting hearing loss may be unilateral in most cases, but its impact on communication and psycho-social function should not be minimized.<sup>2</sup> For many patients, hearing aids and CROS systems may be the remaining treatment option to address communication needs. This intervention is also helpful in patients remaining in the workforce. Along with the many overwhelming emotions that accompany the onset of sudden hearing loss, some individuals fear poor work performance and even job loss. Therefore, patients with incomplete hearing recovery need to be advised of the possible benefits of amplification and hearing-assistive technology.

## References

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