

## Introduction

## Methods

## Conclusion

- When patients perform health related searches, it was found that they tend to look for information about specific medical conditions<sup>1</sup>.
- However, many report that they lack the skills to adequately engage online health resources<sup>2</sup>.
- Chatbots are tools that could be used to bridge eHealth literacy<sup>3</sup>.
- ChatGPT (OpenAI, San Francisco, CA) is a new large language model launched by OpenAI in November 2022 programmed with reinforcement learning techniques.
- This study is the first to evaluate ChatGPT as a resource for patients following an ENT diagnosis compared to search engine results.

- The version of ChatGPT used in this study was from the January 30th, 2023 release note.
- 36 common otolaryngologic disorders were analyzed in this study.
- ChatGPT was then prompted to provide information about each disorder, categorized into: Overview, Symptoms, Causes, Risk Factors, Treatment, and Follow Up.
- The same categories of information of each disorder was then gleaned from reputable sources such as NCBI Statpearls, John Hopkins, Mayo Clinic, and Cleveland Clinic.
- The information from each resource was then reviewed by a board-certified otolaryngologist for accuracy.

- ChatGPT was able to convey the correct information about different aspect of otolaryngological pathologies
- ChatGPT was able to provide information about some pathologies that were not available on other sources.
- ChatGPT allowed for follow up questions.
- Further studies are needed to determine ChatGPT's role in patient education.

## Results

Resource	Overview	Symptoms	Causes	Risk Factors	Treatment	Follow-Up
ChatGPT	Vestibular neuritis is an inner ear disorder that affects the balance and coordination of the body.	Symptoms of vestibular neuritis include dizziness, vertigo, unsteadiness, and nausea.	It is caused by inflammation of the vestibular nerve, which is responsible for sending signals to the brain about the position of the head and body in space.	<b>Prompted:</b> Risk factors for vestibular neuritis include: age >50, viral infections, and family history. It's also worth noting that vestibular neuritis is more common in people with certain underlying health conditions such as diabetes, hypertension, and autoimmune disorders such as multiple sclerosis.	The condition can be treated with medications to reduce inflammation and relieve symptoms, and physical therapy to help retrain the brain to compensate for the loss of vestibular function.	In most cases, the symptoms of vestibular neuritis improve within a few weeks, but in some cases, it may take several months for full recovery. In some cases, residual symptoms may persist. It's important to follow your physician's instructions and recommendations for treatment and management of your condition.
Johns Hopkins	Vestibular neuritis is a condition that affects the vestibular nerve, which connects the inner ear to the brain, causing prolonged vertigo usually in the absence of significant hearing loss. The onset of both conditions is typically abrupt over minutes to hours, and may involve vertigo, imbalance, jumping vision due to eye movements, nausea and vomiting.	The following symptoms usually occur abruptly and persist for days or weeks. Severe, continuous vertigo (the sensation of spinning or tilting). Inability to balance or walk straight. Nausea and vomiting, which can lead to dehydration and extreme fatigue			With time and vestibular physical therapy, there is gradual improvement and the prognosis is generally good. If the doctor believes the person's condition is due to shingles, an anti-viral medication may be prescribed. Although prednisone or other types of steroids may be given and could help hasten recovery, it is not conclusively proved that these medications benefit in the final outcome.	Depending on the eye movement and vestibular examination, a test such as an MRI of the brain may or may not be necessary. People experiencing these symptoms should see a doctor, especially since a stroke can have similar symptoms.
Mayo Clinic	<b>No article</b>					
Cleveland Clinic	Vestibular neuritis is a disorder that affects the vestibulocochlear nerve of your inner ear.	Sudden, severe vertigo. Intense dizziness. Severe balance issues. Nausea and vomiting. Difficulty concentrating. Severe motion sensitivity. Nystagmus.	Experts believe vestibular neuritis results from viral infections that start in your inner ear or begin somewhere else in your body, like chickenpox or viral hepatitis.	Having a viral infection is the main risk factor for vestibular neuritis.	The main goal of vestibular neuritis treatment is to manage your symptoms. To do this, your healthcare provider may recommend: Medications (antivirals and drugs to treat nausea, dizziness and inflammation). Vestibular neuritis exercises (physical therapy).	
StatPearls - NCBI	Vestibular neuritis, also known by the name vestibular neuronitis, is thought to be caused by inflammation of the vestibular portion of the eighth cranial nerve. It is considered a benign, self-limited condition that typically lasts several days, but can take weeks to months for all vestibular symptoms to completely resolve.	Vertigo, Nausea, Vomiting, Balance problems. The symptoms in vestibular neuritis are typically constant, in contrast to the episodic symptoms of other peripheral causes such as BPPV or Meniere's disease.	Vestibular neuritis is believed to be an inflammatory disorder selectively affecting the vestibular portion of the eighth cranial nerve. The cause is presumed to be of viral origin.		The treatment of vestibular neuritis usually consists of acute symptomatic treatment with medications such as antiemetics, antihistamines, and benzodiazepines. Following the acute phase, other therapies, such as vestibular rehabilitation, are often recommendations	

**Table 1: Information Comparison Between ChatGPT vs Online Websites**

Information about vestibular neuronitis is displayed in the table. When ChatGPT did not provide information from a predetermined category, it was prompted, denoted by the red text "Prompted." Cells that are blank are due to websites not having that category of information available. Mayo Clinic did not have an article for vestibular neuronitis at all.

## References

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2. Gray NJ, Klein JD, Noyce PR, Sesselberg TS, Cantrill JA. The Internet: A window on adolescent health literacy. *J Adolesc Heal.* 2005;37(3):243.e1-243.e7. doi:10.1016/j.jadohealth.2004.08.023
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