

SECTION 20.  
MEDICAL SCIENCES AND PUBLIC HEALTH

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## **ANALYSIS OF COMMON CHRONIC DISEASES IN OTOLARYNGOLOGY AMONG ELDERLY PEOPLE IN BEIJING**

**Abstract. Objective:** According to the results of the physical examination of the otorhinolaryngology of the examined population, it is important to understand the common chronic diseases in the otorhinolaryngology Department of the elderly in Beijing, strengthen the preaching and prevention, pay more attention to the treatment of common chronic diseases and the prevention of complications, and improve the overall health of the elderly. **Methods:** In this project, 800 elderly people who participated in physical examination were selected as the study subjects, and according to the number of detected cases, the common chronic diseases in otorhinolaryngology of the elderly population in Beijing were statistically excluded. **Results:** Chronic simple pharyngitis, seasonal allergic rhinitis, chronic hypertrophic pharyngitis, dry rhinitis, dry pharyngitis, snoring symptoms, tinnitus, and deafness were identified as multiple chronic diseases in the elderly population of otorhinolaryngology. **Conclusion:** Society and hospitals should care for the elderly, target common multi morbidity, give health guidance, timely diagnosis and treatment of common diseases, and improve the health level and well-being of the elderly.

### **INTRODUCTION**

The field of Otorhinolaryngology is involved in the diagnosis, treatment, and prevention of diseases involving organs such as hearing, balance sensation, olfaction, vocalization versus speech, breathing, and swallowing, as well as sites such as the skull base, neck, and upper mediastinum 1. The main diseases include inflammation of the head and neck of the ear, nose, throat, congenital diseases, trauma, tumors; tracheal and esophageal foreign body, tumor; neck and skull base tumors; tinnitus, deafness, vertigo, etc. The main common otolaryngological diseases are chronic diseases, intractable and not easy to cure, also have potential risks and trigger comorbidities, bothering elderly people living and sleeping. The treatment of common diseases and the prevention and treatment of related complications in otorhinolaryngology should be paid more attention.

### **RESEARCH AND PROCESS METHODS**

With the consent of the medical ethics committee, a total of 3800 elderly subjects who underwent an otolaryngology health examination at International IKANG Evergreen Medical physical examination centre between March 2020 and March 2023 were randomly selected for this project cohort sampling. The study subjects were divided into male and female groups according to gender, as well as spring, summer, fall, and winter as the seasonal groups. The distribution of the examined individuals is shown in Table 1.

Table 1

**3800 individuals were matched by sex, age, and season of examination**

	gender		age			season			
	male	female	60-70	71-80	Over 81	spring	summer	autumn	winter
Number of individuals	1813	1987	2356	1323	121	872	1075	1012	841

The diagnostic criteria of physical examination were the diagnostic criteria of otolaryngology diseases 2 and the Chinese guidelines for the diagnosis and treatment of allergic rhinitis. The criteria for inclusion of survey data were: those with good adherence who were able to cooperate with those who completed the examination items. Exclusion criteria: those with cognitive impairment who were unable to cooperate with healthcare workers to complete the complete examination.

In the project, 3800 subjects were examined by the authors. The examination was performed in an otorhinolaryngology examination chair after questioning about the previous history, allergy and related symptoms. The ear was examined by visual inspection, palpation, sniffing, auscultation and inspection of the auricle, external auditory meatus, periauricular, mastoid region and tympanic membrane. The tympanic membrane was examined by an electric otoscope with a self-contained light source and magnifying lens, and hearing was tested using a c256 tuning fork. Among them nasal examination was external nose and sinus examination. The nasal examination was dominated by perimetry and palpation. Examination of the nasal vestibule, nasal passages require the use of an anterior rhinoscope. Check the pharynx by perimetry and palpation. Laryngeal examination was performed by auscultation. Neck examined by palpation, palpability.

**RESULT AND ANALYSIS**

The disease detection status of the 3800 cases examined is shown in Table 2. Some of these subjects had two or more diseases, so the total proportion was greater than 100%.

Table 2

**Physical examination result of 3800 individuals**

Physical examination result	Number	Ratio
Normal	342	9.00%
Chronic simple pharyngitis	976	25.68%
Anaphylactic rhinitis	563	14.82%
Chronic hypertrophic pharyngitis	709	18.66%
Osahs	136	3.58%
Dryness pharyngitis	134	3.50%
Tinnitus	247	6.50%
External auditory canal cerumen emboli	365	9.61%
Dry rhinitis	298	7.84%
Deafness hearing loss	469	12.34%
Vertigo otolithiasis	29	0.76%

According to the detection rate, chronic simple pharyngitis, seasonal allergic rhinitis, chronic hypertrophic pharyngitis, dry rhinitis, dry pharyngitis, snoring, nasal septum deviation, tinnitus, deafness, vertigo, and so on are more frequently detected. Differ from that of healthy adults 3. Allergic rhinitis manifests as nasal itching, sneezing, nasal obstruction, and rhinorrhea, which can be accompanied by bronchial asthma, allergic conjunctivitis, sinusitis, nasal polyps, and secretory otitis media and other complications, but also affects patients' psychological and mental status 4, leading to anxiety and depression, etc. Beijing allergens showed an increasing trend of molds, grass pollens, tree pollens, and animal dander, among which ragweed and mugwort were detected at a higher rate 5.

Snoring disorder and chronic hypertrophic pharyngitis are more frequent in the elderly, and are found on physical examination to be higher in men than in women. Part of the snoring disorder can develop into obstructive sleep apnea syndrome, which damages the cardio cerebrovascular and nervous systems, etc. 6, and is associated with the pathogenesis of many chronic diseases, such as hypertension and diabetes 8, and seriously injures patients' quality of life 7, so that we should pay more attention to early detection, early diagnosis, and early treatment. Meanwhile, tinnitus, presbycusis, and vertigo were detected more frequently in the elderly population. Deafness affects elderly person communication and increases the risk of Alzheimer's and anxious depression, vertigo increases the risk of fall attacks, and tinnitus is closely associated with anxious depression 9.

### CONCLUSION

Beijing weather is dry and windy, and cold in winter, along with the aggravation of environmental pollution, chronic pharyngitis, allergic rhinitis and other common otolaryngology diseases have a high number of people, and the disease course is recalcitrant and not easily curable, which causes some distress to the health of the elderly. Practicing good lifestyle habits, wearing masks, light eating, quitting smoking with little alcohol and reasonable exercise is beneficial for the prevention and treatment of ENT diseases. In the pandemics' era, when masks are worn spontaneously compared with when they were not worn before, their symptoms of allergic rhinitis and chronic pharyngitis have significantly improved, and the degree of recognition and acceptance of wearing them is higher.

Otolaryngological chronic diseases are generally considered not to pose a direct threat to patient life safety and are easily ignored. However, these chronic diseases affect elderly people's quality of life and sleep to different degrees. Smoking cessation with less alcohol, wearing masks, eating a reasonable diet, taking a regular diet, and exercising your body can reduce morbidity and reduce the incidence of comorbidities. Regular health checkups are required for older people. In response to common chronic diseases in otorhinolaryngology, health care workers should issue brochures and special lectures to the elderly to do a good preventive preaching work, improve the emphasis of examiners, guide the development of individualized precision intervention programs, and improve the well-being index and the overall level of health of the elderly.

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