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CLINICAL ANALYSIS OF ENDOSCOPIC DACRYOCYSTORHINOSTOMY IN PATIENTS WITH CHRONIC DACRYOCYSTITIS

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Annotation: Chronic dacryocystitis remains a significant problem in ophthalmology and otorhinolaryngology despite the development of modern diagnostic and surgical technologies. The aim of this study was to analyze the clinical characteristics and gender distribution of patients undergoing endoscopic dacryocystorhinostomy (DCR). The study included patients treated at the Medical Pro Clinic between 2022 and 2023. The analysis evaluated the frequency of right-sided, left-sided, and bilateral DCR procedures, repeated surgeries, and combined interventions with septoplasty. The results showed that chronic dacryocystitis was observed significantly more frequently in female patients. Right- and left-sided involvement occurred almost equally, while bilateral cases accounted for approximately one-fifth of all patients. The study also evaluated the association between chronic dacryocystitis and nasal cavity pathologies. The findings highlight the importance of multidisciplinary cooperation between ophthalmologists and otorhinolaryngologists for improving surgical outcomes and patient management.

Keywords: chronic dacryocystitis, endoscopic dacryocystorhinostomy, lacrimal drainage system, nasal cavity pathology, septoplasty, ophthalmology, otorhinolaryngology

Introduction

Diseases of the lacrimal drainage system, particularly chronic dacryocystitis, remain a relevant medical problem despite advances in modern diagnostic and treatment methods. The development of imaging technologies such as computed tomography and magnetic resonance imaging has significantly improved the ability to diagnose pathological changes in the lacrimal sac and nasolacrimal duct, as well as in the structures of the nasal cavity and paranasal sinuses.

However, even with modern diagnostic methods and surgical techniques, the effectiveness of treatment for chronic dacryocystitis is not always satisfactory due to the risk of postoperative recurrence. Traditionally, many surgical methods were radical in nature and did not fully consider functional and organ-preserving principles. Modern endoscopic surgery emphasizes minimally invasive and functional approaches that aim to preserve anatomical structures and improve physiological outcomes.

Chronic dacryocystitis accounts for approximately 10–20% of patients admitted to ophthalmologic hospitals. At the same time, many patients require surgical treatment in otorhinolaryngology departments. Therefore, lacrimal system diseases represent an interdisciplinary problem involving both ophthalmologists and ENT specialists.

Methods

This study was conducted at the Medical Pro Clinic and included patients diagnosed with chronic dacryocystitis between 2022 and 2023. A total of 175 patients who underwent endoscopic dacryocystorhinostomy were included in the analysis.

Clinical data were retrospectively analyzed to evaluate the distribution of surgical procedures. The study assessed the frequency of right-sided, left-sided, and bilateral DCR operations, repeated surgical interventions, and procedures combined with septoplasty. Gender distribution among patients was also analyzed.

In addition, the study evaluated the occurrence of nasal cavity and paranasal sinus pathologies associated with chronic dacryocystitis in the examined patient population.

Results

The analysis of surgical interventions performed in 2022 demonstrated that right-sided and left-sided dacryocystorhinostomy procedures occurred with almost equal frequency. Bilateral dacryocystitis was observed in approximately one-fifth of patients. A smaller proportion of patients required repeated surgical intervention due to recurrence of the disease.

A significant number of patients underwent combined surgical procedures involving dacryocystorhinostomy and septoplasty. This indicates that structural abnormalities of the nasal cavity often coexist with disorders of the lacrimal drainage system.

Gender analysis revealed that chronic dacryocystitis was significantly more common among female patients compared with male patients. Female patients constituted the majority of the study population.

In addition, the study evaluated the frequency of nasal cavity pathologies among patients with chronic dacryocystitis. The majority of patients did not present with significant paranasal sinus pathology. However, some patients showed nasal septum deviation, middle turbinate hypertrophy, sinusitis, or anatomical anomalies of the nasal cavity. A small proportion of cases represented congenital dacryocystitis that persisted into adulthood.

Seasonal analysis of the cases indicated that the frequency of the disease tended to increase during the spring months.

Discussion

The results of the present study confirm that chronic dacryocystitis remains a common condition requiring surgical treatment. The predominance of female patients observed in this study corresponds with findings reported in previous clinical research. Anatomical features of the lacrimal drainage system and hormonal factors may contribute to the higher prevalence of the disease among women.

The nearly equal distribution of right- and left-sided dacryocystitis suggests that anatomical variations rather than laterality play a major role in disease development. Bilateral involvement, observed in a significant proportion of patients, indicates that the pathological process can affect both lacrimal drainage systems simultaneously.

The presence of nasal cavity abnormalities such as septal deviation or turbinate hypertrophy may contribute to impaired lacrimal drainage and may increase the risk of chronic inflammation and obstruction of the nasolacrimal duct.

The study also demonstrates the importance of combining dacryocystorhinostomy with additional nasal procedures when necessary. Such combined surgical approaches may improve the effectiveness of treatment and reduce the likelihood of recurrence.

Conclusion

The findings of this study emphasize the importance of cooperation between ophthalmologists and otorhinolaryngologists in the management of patients with chronic dacryocystitis.

A multidisciplinary approach allows for comprehensive evaluation of both the lacrimal drainage system and the nasal cavity structures before surgical intervention. Ophthalmologists can assess associated ocular conditions, while ENT surgeons can evaluate nasal anatomy and perform necessary endonasal procedures.

The results of this research indicate that chronic dacryocystitis occurs more frequently in female patients and that bilateral involvement accounts for a significant proportion of cases. Seasonal variation with increased incidence in spring months was also observed.

Therefore, close collaboration between specialists and the use of modern endoscopic surgical techniques can improve treatment outcomes and provide optimal care for patients with chronic dacryocystitis.

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