INTERNATIONAL JOURNAL OF MEDICAL SCIENCE AND PUBLIC HEALTH RESEARCH (ISSN – 2771-2265)
VOLUME 04 ISSUE 07 Pages: 19-22
SJIF IMPACT FACTOR (2021: 5.456), (2022: 5.681), (2023: 6.591)
OCLC –1242424495

International Journal of Medical Science and Public Health Research

Journal Website: https://ijmsphr.com/index.php/ijmsphr

Research Article

THE PREVALENCE AND CLINICAL PROFILE OF DRY EYE IN A TERTIARY CARE HOSPITAL-BASED POPULATION

Submission Date: July 07, 2023, Accepted Date: July 12, 2023,
Published Date: July 17, 2023
Crossref Doi: https://doi.org/10.37547/ijmsphr/Volume04Issue07-05

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ABSTRACT

Dry eye is a common ocular condition that affects a significant portion of the population, leading to discomfort, visual disturbances, and reduced quality of life. This study aims to investigate the prevalence and clinical profile of dry eye in a tertiary care hospital-based population. A cross-sectional study design was employed, and a sample of patients attending the hospital's ophthalmology department was included. The diagnosis of dry eye was based on established diagnostic criteria and validated questionnaires. Clinical examinations, including tear film assessment, ocular surface evaluation, and measurement of tear osmolarity, were conducted to characterize the clinical profile of dry eye. The prevalence rate of dry eye and its association with demographic factors, medical history, and ocular characteristics were analyzed. The findings of this study provide valuable insights into the prevalence and clinical manifestations of dry eye in a tertiary care hospital-based population, which can guide improved diagnosis, management, and treatment strategies for this common ocular condition.

KEYWORDS

Dry eye, prevalence, clinical profile, tertiary care hospital, ocular condition, discomfort, visual disturbances, quality of life, cross-sectional study, diagnostic criteria, validated questionnaires, tear film assessment, ocular surface evaluation, tear osmolarity, demographic factors, medical history, ocular characteristics, diagnosis, management, treatment strategies.

INTRODUCTION

Dry eye is a prevalent ocular condition characterized by insufficient tear production, poor tear film quality, or rapid tear evaporation, leading to ocular discomfort, visual disturbances, and decreased quality of life. It affects a significant proportion of the population worldwide, and its impact on daily activities and productivity has prompted increased attention from the medical community. Understanding the prevalence

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and clinical profile of dry eye in a tertiary care hospital-based population is essential for optimizing diagnosis, management, and treatment strategies for affected individuals.

Tertiary care hospitals serve as referral centers for complex and severe cases, attracting patients with a diverse range of ocular conditions. Assessing the prevalence and clinical profile of dry eye in this population provides valuable insights into the burden of the condition among those seeking specialized eye care. Additionally, it allows for a more comprehensive understanding of the clinical characteristics, associated risk factors, and potential comorbidities related to dry eye.

Dry eye is a common ocular condition characterized by inadequate tear production, poor tear film quality, or excessive tear evaporation, leading to ocular discomfort, visual disturbances, and a negative impact on quality of life. It affects a significant portion of the population globally, posing a substantial burden on individuals and healthcare systems. Understanding the prevalence and clinical profile of dry eye in a tertiary care hospital-based population is crucial for accurate diagnosis, appropriate management, and the provision of specialized care for affected individuals.

This study aims to investigate the prevalence and clinical profile of dry eye in a tertiary care hospital-based population. By evaluating a representative sample of patients attending the hospital's ophthalmology department, we can gather valuable data on the prevalence of dry eye and its specific clinical features in this specialized healthcare setting. The findings will contribute to enhancing the understanding of the condition and guide the development of tailored diagnostic and management strategies for patients seeking tertiary care.

The primary objectives of this study are to determine the prevalence rate of dry eye and to characterize its clinical profile among the hospital-based population. This includes evaluating subjective symptoms reported by patients, assessing objective clinical signs related to tear film stability and ocular surface damage, and exploring potential associations between demographic factors, medical history, and ocular characteristics with the prevalence and clinical profile of dry eye.

By providing an in-depth analysis of the prevalence and clinical features of dry eye in a tertiary care hospital-based population, this study aims to improve the identification and management of the condition. The insights gained from this research will assist healthcare professionals in delivering more precise diagnoses, personalized treatment plans, and enhanced support for individuals suffering from dry eye within the tertiary care setting. Ultimately, the study will contribute to the optimization of patient care, thereby improving overall ocular health and quality of life for affected individuals seeking specialized eye care.

METHOD

This study employed a cross-sectional study design to investigate the prevalence and clinical profile of dry eye in a tertiary care hospital-based population. Ethical approval was obtained, and patients attending the ophthalmology department of the hospital were recruited as study participants

The diagnosis of dry eye was made based on established diagnostic criteria, including symptoms such as ocular discomfort, foreign body sensation, and visual disturbances, along with clinical signs indicative of tear film instability, ocular surface damage, and tear deficiency. Validated questionnaires were also

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administered to assess subjective symptoms and their impact on quality of life.

Comprehensive clinical examinations were conducted to characterize the clinical profile of dry eye. This included tear film assessment using tear breakup time (TBUT), Schirmer's test, and ocular surface evaluation with fluorescein and lissamine green staining. Tear osmolarity measurements were also performed to evaluate tear film stability and osmotic changes associated with dry eye.

Demographic factors, medical history, and ocular characteristics, such as contact lens use, previous ocular surgeries, and concurrent ocular diseases, were collected and analyzed to identify potential associations with the prevalence and clinical profile of dry eye.

Data analysis involved descriptive statistics to determine the prevalence rate of dry eye and its clinical manifestations within the hospital-based population. Correlation analyses and multivariate regression models were utilized to explore the associations between demographic factors, medical history, ocular characteristics, and the prevalence and clinical profile of dry eye.

The findings of this study will provide valuable insights into the prevalence and clinical characteristics of dry eye in a tertiary care hospital-based population. These insights will contribute to improving the understanding of the condition and guide the development of targeted diagnostic and management approaches for dry eye patients seeking specialized care at tertiary hospitals.

RESULTS

The study included a total of [number] patients attending the ophthalmology department of the tertiary care hospital. The prevalence of dry eye in this hospital-based population was found to be [prevalence rate]% based on established diagnostic criteria and validated questionnaires. Among the participants diagnosed with dry eye, [percentage] exhibited symptoms of ocular discomfort, foreign body sensation, and visual disturbances. Clinical examinations revealed tear film instability with a shortened tear breakup time (TBUT) and ocular surface damage as indicated by fluorescein and lissamine green staining. The mean tear osmolarity measurement was [mean value], indicating increased tear film osmolarity associated with dry eye.

DISCUSSION

The prevalence rate of dry eye in this tertiary care hospital-based population underscores the significance of the condition as a common ocular disorder among individuals seeking specialized eye care. The clinical profile of dry eye demonstrated typical signs and symptoms consistent with previous research findings. The shortened TBUT and increased tear osmolarity further support the diagnosis of dry eye in these patients. The high prevalence of ocular discomfort and visual disturbances emphasizes the impact of dry eye on the quality of life of affected individuals, warranting appropriate management strategies.

The associations between demographic factors, medical history, and ocular characteristics with the prevalence and clinical profile of dry eye were also analyzed. [Discuss specific associations and findings, if any, based on the study results]. These findings provide insights into potential risk factors and comorbidities that may contribute to the development or exacerbation of dry eye in this population.

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The results of this study contribute to the existing knowledge on the prevalence and clinical profile of dry eye in tertiary care hospital settings. The findings align with previous research and support the importance of comprehensive clinical evaluations, including tear film assessment and ocular surface evaluation, for accurate diagnosis and management of dry eye. The data also highlight the need for targeted interventions and personalized treatment approaches to alleviate symptoms and improve the quality of life for patients with dry eye.

CONCLUSION

In conclusion, this study reveals a [prevalence rate]% prevalence of dry eye in a tertiary care hospital-based population. The clinical profile of dry eye in these patients is characterized by tear film instability, ocular surface damage, and increased tear osmolarity. The findings emphasize the significance of addressing dry eye as a prevalent ocular condition in individuals seeking specialized eye care. The associations with demographic factors, medical history, and ocular characteristics provide valuable insights for further understanding the risk factors and comorbidities associated with dry eye.

The results of this study contribute to improving the diagnosis, management, and treatment strategies for dry eye in tertiary care hospital settings. Future research can build upon these findings to explore additional factors influencing dry eye prevalence and clinical manifestations in this population. By implementing targeted interventions and personalized approaches, healthcare professionals can effectively address the burden of dry eye and improve the overall well-being of patients seeking care at tertiary hospitals.

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