นิพนธ์ต้นฉบับ/Original Article

ความชุกและปัจจัยที่เกี่ยวข้องกับต้อเนื้อที่โรงพยาบาลศูนย์ตติยภูมิในภาคเหนือของประเทศไทย

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บทคัดย่อ

วัตถุประสงค์: งานวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาความชุกและปัจจัยที่เกี่ยวกับต้อเนื้อใน โรงพยาบาลมหาวิทยาลัยที่เป็นศูนย์ส่งต่อผู้ป่วย

วิธีการ: เป็นการศึกษาเชิงพรรณนาแบบตัดขวาง โดยเก็บข้อมูลจากห้องตรวจผู้ป่วยนอกของโรงพยาบาลมหาราชนครเชียงใหม่ระหว่างเดือนพฤษภาคม 2558 ถึงเดือนพฤษภาคม 2559 ผู้ป่วยที่ได้รับการวินิจฉัยเป็นต้อเนื้อจากจักษุแพทย์ ต้องมีอายุมากกว่าหรือเท่ากับ 30 ปี นำตัวแปรทางประชากรและสังคมได้แก่ อายุ เพศ จำนวนชั่วโมงที่เจอแสงแดดต่อวัน ภาวะการสูบบุหรี่ มาวิเคราะห์

ผลการศึกษา: งานวิจัยนี้เก็บข้อมูลผู้ป่วยที่เป็นต้อเนื้อได้ 391 ตา คิดเป็นร้อยละ 0.97 โดยพบต้อเนื้อสูงสุดในกลุ่มอายุ 50 ถึง 59 ปี โดยส่วนใหญ่ จะพบในเพศหญิง 207 ตา ในตาขวา 223 ตา ต้อเนื้อที่ด้านหัวตา 330 ตา ผู้ป่วยที่มีประวัติการสูบบุหรี่ จำนวน 240 ตา และผู้ป่วยที่เจอแสงแดดมากกว่าหรือเท่ากับ 6 ชั่วโมงต่อวัน จำนวน 231 ตา

บทสรุป: ความชุกของต้อเนื้อในการศึกษาครั้งนี้คิดเป็นร้อยละ 0.97 ต้อเนื้อมีความสัมพันธ์กับ อายุที่มากขึ้น เพศหญิง ตาขวา ต้อเนื้อที่เกิดด้านหัวตา ผู้ป่วยที่มีประวัติสูบบุหรี่ และผู้ป่วยที่เจอแสงแดดเป็นเวลานาน **จักษุเวชสาร 2016; กรกฎาคม-ธันวาคม 30(2): 95-100.**

คำสำคัญ: ความชุก ต้อเนื้อ การเจอแสงแดด

ผ่านการรับรองจริยธรรมวิจัย วันที่ 4 พฤษภาคม 2558 จากคณะกรรมการวิจัย ชุดที่ 4 คณะแพทยศาสตร์ มหาวิทยาลัยเชียงใหม่.

ผู้นิพนธ์ทั้งหมดไม่มีส่วนเกี่ยวข้องหรือผลประโยชน์ใดๆ กับผลิตภัณฑ์ที่ได้กล่าวอ้างถึงในงานวิจัยนี้

ภาควิชาจักษุวิทยา คณะแพทยศาสตร์ มหาวิทยาลัยเชียงใหม่

นิพนธ์ต้นฉบับ/Original Article

Prevalence and associated factors for pterygium at a tertiary referral center in Northern Thailand

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Abstract

Objective: This study aimed to evaluate the prevalence of pterygium and its associated factors in a university-based referral center.

Methods: A cross-sectional descriptive study was conducted at the out-patient eye clinic at Chiang Mai University hospital between May 2015 and May 2016. Subjects were patients of 30 years or older who were diagnosed with pterygium by an ophthalmologist. Socio-demographic parameters including age, gender, number of hours of sunlight exposure per day, and smoking status were included for analysis.

Results: This study comprised 391 eyes (0.97% of 40309 eyes presented at the clinic) diagnosed with pterygium. Most patients with pterygium (35.04%) were between 50-59 years of age. Pterygium was associated with female gender (207 eyes), right eye (223 eyes), nasal site (330 eyes), history of smoking (240 eyes), and duration of sunlight exposure for 6 hours or more per day (231 eyes).

Conclusion: Prevalence of pterygium in this study was 0.97%. Pterygium was related with increasing age, female gender, right eye, nasal region, history of smoking, and long duration of sunlight exposure. **Thai J Ophthalmol 2016; July-December 30(2): 95-100.**

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Introduction

Pterygium refers to the degeneration of the conjunctiva and is mostly found among people in tropical regions, especially those living closer to the equator. Although the exact causes and mechanisms of pterygium still remain unknown[1,2], it is believed that factors including age[1,3,4], sunlight[5,6], ultraviolet radiation[6], smoking[7], and chronic irritation or dryness of eyes usually cause this condition. Pterygium is a triangular fibrovascular tissue that develops from the bulbar conjunctiva and encroaches toward the cornea. The blood vessels are raised and visible. Signs and symptoms of pterygium depend on its severity. An inflamed pterygium can cause swelling, irritation, tearing, and redness. In advanced cases where the tissue has invaded the pupil resulting in blurred vision, surgical treatment may be required.

The aim of this study is to explore the prevalence and risk factors of pterygium in a university-based referral center. The information may raise awareness to prevent the risks of pterygium development.

Methods

A cross-sectional descriptive study was conducted between May 2015 and May 2016. The study population was out-patients aged 30 years or older treated in Chiang Mai University hospital. Socio-demographic variables including age, gender, number of hours of sunlight exposure, and smoking status were considered for analysis. Patients diagnosed with pterygium by ophthalmology residents or full-time ophthalmologists underwent anterior segment photography and complete eye examination. Patients who could not undergo anterior segment photography, patients below 30 years of age and patients diagnosed with pinguecula were excluded from the study. Patients were divided into five age groups (30-39, 40-49, 50-59, 60-69, 70 years or older). Laterality and location of pterygium were recorded.

Results

The numbers of eyes presented at the out-patient eye clinic during May 2015 to May 2016 were 40309. Three hundred and ninety-one eyes (0.97%) were diagnosed with pterygium. The number of patients divided by age groups of 30-39, 40-49, 50-59, 60-69, 70 years or older were 18, 52, 137, 123, 61, respectively (Figure 1). Females had a higher prevalence than males (female 207 eyes, male 184 eyes). Pterygium was presented in the right eye more than the left eye (right eye 223 eyes, left eye 168 eyes). The site of pterygium was nasal (Figure 2) in 330 eyes and temporal in 32 eyes. Twenty-nine eyes had both nasal and temporal pterygium. One hundred and fifty one subjects had no history of smoking and 240 subjects had a history of smoking. Patients who had exposure to sunlight less than 6 hours per day and 6 hours or more per day were 160 eyes and 231 eyes, respectively (Figure 3).

Discussion

The prevalence of pterygium which presented in a university-based referral center was 0.97%. Many studies reported a wide range of the prevalence of pterygium between 0.7% and 48%[8-11]. These variations may be caused by the cut-off age for pterygium diagnosis and also the type of study such as population or hospital-based data collection. The results of our study indicate that pterygium is more prevalent in elderly people than in younger people. Also, it more often affects the right eye than the left

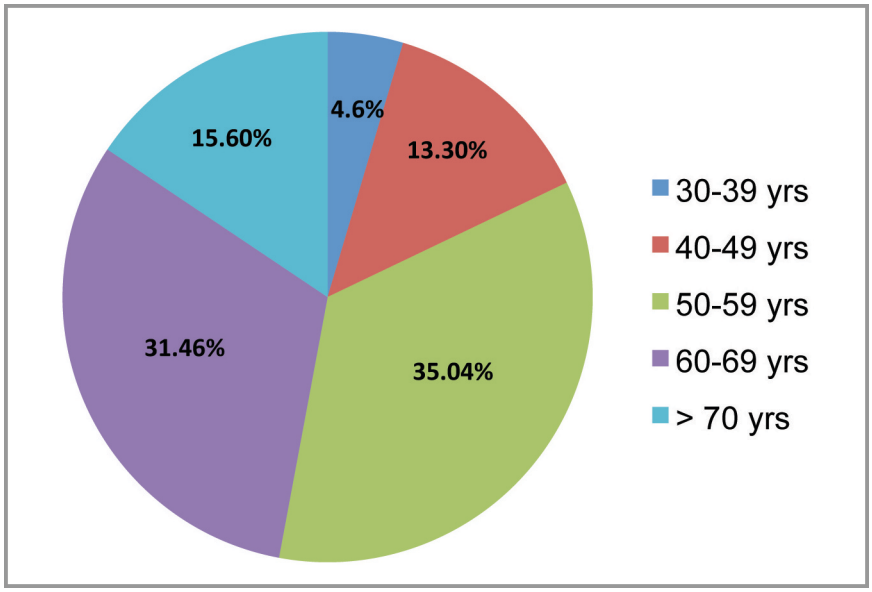

Figure 1. *Prevalence of pterygium classified by age*

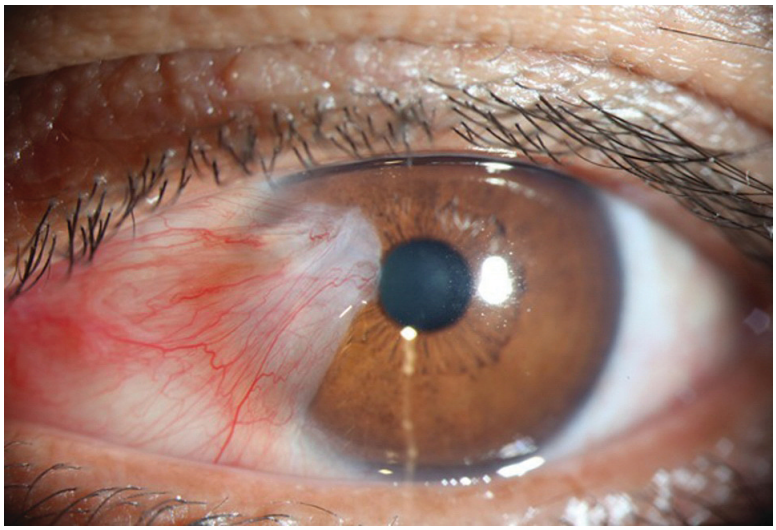

Figure 2. *Nasal pterygium in left eye*

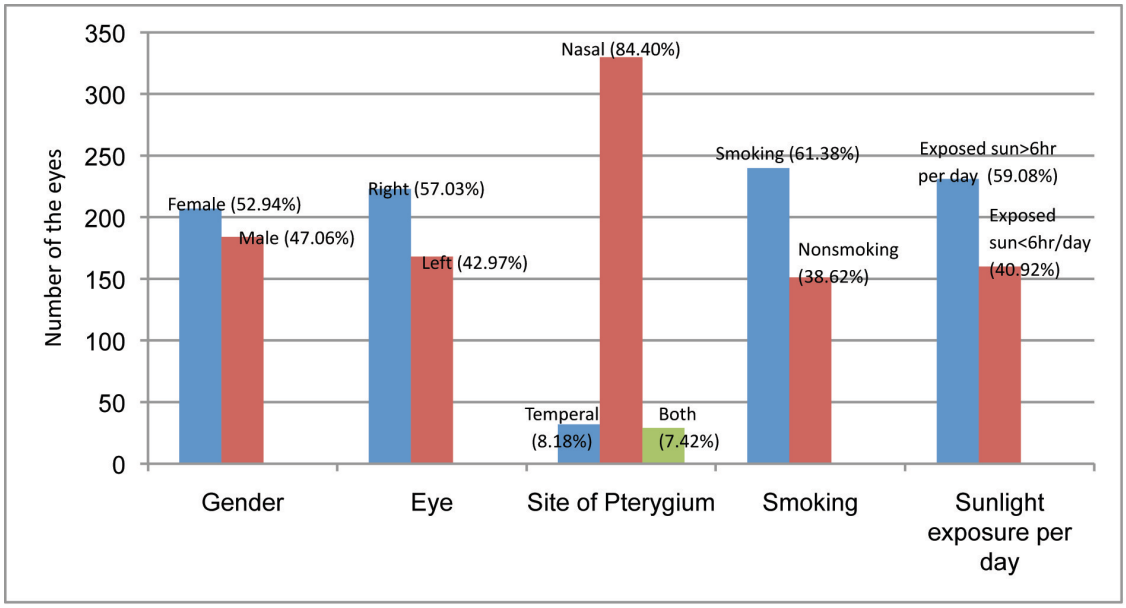

Figure 3. *Associated factors related to pterygium*

eye. Interestingly, we have not found bilateral pterygium. Although the exact reason is unknown and no other studies have investigated this, nasal pterygium is the most common location found among the subjects of the study. It has also been observed that smoking subjects are more likely to develop pterygium than non-smoking subjects. This result was different from study of Rong et al [7]. However, it may depend on the definition of smoking which varies from study to study. Patients who were exposed to sunlight more than 6 hours per day had a greater risk of pterygium than those who had less than 6 hours of sunlight exposure. This result is consistent with other studies as it is a known fact that ultraviolet is a major factor in causing pterygium[6]. Since most patients presented at our out-patient eye clinic had worked in agricultural sectors, they are inevitably exposed to direct sunlight.

This study has some limitations. Firstly, the research was set up as a university-based study which may be potentially biased compared to a population-based study. Secondly, because this is a cross sectional study, it did not allow identification of a long-term association between pterygium and age and other parameters.

Conclusion

Prevalence of pterygium in this study was 0.97%. Pterygium was related to increasing age, female gender, right eye, nasal region, history of smoking, and sunlight exposure. This information may raise awareness to avoid the preventable risks of pterygium development and progression.

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