Evaluation of the care characteristics of ophthalmic emergencies in a public hospital in greater São Paulo

Avaliação das características do atendimento de urgências oftalmológicas em um hospital público da grande São Paulo

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ABSTRACT

Purpose: Evaluate the characteristics of patients seen in the emergency department of ophthalmology in order to identify measures to improve the effectiveness of care and guide the enhancement of other emergency services. Methods: Cross-sectional, observational study with 300 patients treated at the Municipal Hospital of Santo Andre - Sao Paulo from 15 to 22 august 2011. Data were collected through interviews with patients based on a questionnaire. Results: It was observed that 73.7% lived at a distance of up to 20 km from the hospital and 71.6% of real emergencies and 61.3% of false emergencies sought treatment within a week of the onset of symptoms. Conclusion: Considered the need to provide information to the population about the type and severity of ocular emergencies, with emphasis on prevention and the importance of the most prevalent diseases such as corneal foreign body and corneal ulcer, and health policies aimed at creation of regional centers of specialized care in order to minimize barriers to access and increase the speed in the treatment of ocular emergencies.

Keywords: Emergency service, hospital; Eye/anomalies; Eye diseases; Questionnaires

RESUMO

Objetivo: Avaliar as características dos pacientes atendidos no pronto socorro de oftalmologia, a fim de identificar medidas que melhorem a eficiência do atendimento e nortear o aprimoramento de outros serviços de urgência. Métodos: Estudo transversal e observacional, com 300 pacientes, atendidos no Hospital Municipal de Santo André (SP), de 15 a 22 de agosto de 2011. Os dados foram coletados por meio de avaliação clínica e de entrevistas com pacientes baseadas em um questionário. Resultados: Observou-se que 73,7% residiam a uma distância de até 20 km do hospital, 71,6% das urgências verdadeiras e 61,3% das urgências falsas procuraram atendimento em até uma semana do início dos sintomas. Conclusão: Considera-se a necessidade de disponibilizar para a população informações a respeito do tipo e da gravidade de urgências oculares, com ênfase na prevenção e na importância das doenças mais prevalentes, como corpo estranho corneano e úlcera de córnea, além de políticas de saúde direcionadas à criação de centros de atendimento especializados regionais, a fim de minimizar barreiras para acesso e aumentar a rapidez no tratamento de urgências oculares.

Descritores: Serviço hospitalar de emergência; Olho/anormalidades; Oftalmopatias; Questionários

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The authors declare no conflict of interest.

Received for publication 04/04/2014 - Accepted for publication 29/08/2014

Rev Bras Oftalmol. 2015; 74 (2): 89-91
**INTRODUCTION**

Providing proper care for ocular emergencies impacts the health and well-being of patients due to the potential risk of irreversible visual loss. In many situations, the visual prognosis is related to the swiftness and effectiveness of initial treatment. Barriers to timely treatment include the lack of awareness about the seriousness of eye conditions and transport difficulties. The aim of this study was to evaluate the characteristics of patients seen in an ophthalmic emergency department in order to identify measures to increase the effectiveness of care and guide the improvement of other emergency services.

**METHODS**

This was a cross-sectional, observational study of 300 patients seen at the Municipal Hospital of Santo André, São Paulo, over a typical week, from 15 to 22 August 2011. During this period, all patients attending the hospital’s ophthalmic emergency service who agreed to participate were included in the study.

Subjects underwent clinical examination and were interviewed using a questionnaire. Study variables included gender, age, diagnosis, distance travelled to reach the hospital, and time elapsed between the onset of symptoms and provision of medical care.

True emergencies were defined as cases with a risk of visual impairment in the short to medium term or those requiring immediate assessment due to the severity of symptoms.

Data were processed using descriptive statistics methods; categorical variables were expressed as absolute frequencies, adopting p<0.05 to reject the null hypothesis.

The study was approved by the Research Ethics Committee of ABC Medical School.

**RESULTS**

Most patients were aged 20-45 years (58%), with a predominance of males (68%).

Table 1

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conjunctivitis</td>
<td>93</td>
<td>31.0</td>
</tr>
<tr>
<td>Corneal foreign body</td>
<td>54</td>
<td>18.0</td>
</tr>
<tr>
<td>Corneal ulcer</td>
<td>39</td>
<td>13.0</td>
</tr>
<tr>
<td>Trauma</td>
<td>30</td>
<td>10.0</td>
</tr>
<tr>
<td>Non-specific irritation</td>
<td>24</td>
<td>8.0</td>
</tr>
<tr>
<td>Uveitis</td>
<td>18</td>
<td>6.0</td>
</tr>
<tr>
<td>Acute glaucoma</td>
<td>12</td>
<td>4.0</td>
</tr>
<tr>
<td>Normal Examination</td>
<td>09</td>
<td>3.0</td>
</tr>
<tr>
<td>Others*</td>
<td>21</td>
<td>7.0</td>
</tr>
</tbody>
</table>

Total 300 100.0

*Other: senile cataract, posterior vitreous detachment, retinal detachment, venous branch occlusion, ectropion, trichiasis, eye deviation, and refractive error.

**DISCUSSION**

Ophthalmic emergencies represent an imminent risk of eye damage and should be diagnosed and treated as soon as possible in order to avoid irreversible visual loss and limitations in the quality of life of patients.

The present work found a prevalence of male patients, similar to previous studies such as Almeida et al., which included 26,358 patients seen at the ophthalmic emergency service of the Altino Ventura Foundation, among others. This is explained by the fact that men are more susceptible to risk factors such as hazardous professions, traffic and sports.

The most prevalent age group was 20-45 years, which is in agreement with the literature. The most frequent diagnosis was conjunctivitis, followed by foreign body (Table 1), also in agreement with previous studies.

The fact that most patients (73.7%) lived near the hospital (less than 20 km away) (Table 2) was positive finding, because easy access to health services helps meet the demand for medical care, providing early diagnosis and treatment and a better follow-up, thus improving the visual prognosis. This is in contrast with a study conducted in the city of Campinas, where most patients...
(71.0%) needed to travel for more than 20 km in order to receive medical care. It should be noted that the Municipal Hospital of Santo André is open 24 hours a day and restricts spontaneous demand from patients living in other municipalities. Thus, our results suggest that the availability of specialised care contributes to reducing the transport difficulties of patients with ocular emergencies in the region, facilitating access and improving the response capacity of the health unit.

For 71.6% of true emergencies and 61.3% of false emergencies, the time elapsed between the onset of symptoms and the provision of medical care was less a week (Table 3), a higher proportion than in the Campinas region (55.6% for real emergencies and 53.8% for false emergencies). This finding suggests that the shorter average distance to the hospital contributed to reducing the time until provision of medical care. The results also suggest that there is little awareness about the severity of symptoms, as in 28.4% of real emergencies, where early treatment could influence the final visual result, the time elapsed until provision medical care was more than a week, similar to false emergencies (38.7%). This probably indicates that, in general, the severity of symptoms did not determine how quickly patients sought medical care.

Thus, the results of this study suggest the need to raise awareness about the types and severity of ocular emergencies among the local population, stressing prevention and the importance of prevalent diseases such as corneal foreign body, corneal ulcer, and ocular trauma. This study has also illustrated the benefits of providing specialised care at the regional level, thus reducing the distance to medical services, an initiative that would be highly effective if widely implemented.

**REFERENCES**


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Rev Bras Oftalmol. 2015; 74 (2): 89-91