

Knowledge of ophthalmic triage is insufficient in Dutch ED's: *a clinical vignette study*

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Background/Aims

In general emergency departments (ED's) ophthalmic problems are a marginal subject of attention. Nevertheless, some eye diseases need rapid treatment and could cause blindness if treated too late. The aim of this study was to assess the knowledge of ophthalmic triage in general ED's in the Netherlands.

Methods

In 8 Dutch general hospitals, we invited 120 ED employees to rate 20 clinical vignettes, represented patients with ophthalmic problems, as high, medium or low urgent. One-way ANOVA was used to analyze differences in performance between professional groups and hospitals. Paired t-tests were applied to analyze differences between high, medium and low urgent vignettes. The following vignettes were individually inspected and described: 1) vignettes undertriaged by $\geq 50\%$; and 2) vignettes overtriaged by $\geq 75\%$.

3 ♂ 58 years old
Self-referrer
Time of arrival: 17:30 hrs

Complaint
Vision in the right eye has deteriorated during the last twelve hours.
No ocular pain reported.
Patient reports seeing floaters but no flashes.

General health
No problems

14 ♂ 20 years old
Self-referrer
Time of arrival: 01:00 hrs

Complaint
While in a pub, the patient received a blow to the eye.
Eye is closed and swollen, vision is therefore unknown.

General health
No known problems except for current intoxicated state

Results

Six hospitals participated with an 87% response rate: 30 triage assistants, 28 emergency residents and 20 emergency physicians. High urgent vignettes were scored better (65%) than medium (47%, $Z=4.08$; $p<0.001$) and low (46%, $Z=4.48$; $p<0.001$) urgent vignettes. Four vignettes were undertriaged by $\geq 50\%$; they were related to visual loss without flashes or potential intraocular damage. Three vignettes were overtriaged by $\geq 75\%$; they were related to photosensitivity, pain, and suspected retinal detachment without visual loss or viral infections.

Conclusion

Patients, especially those with acute visual loss without flashes and potential intraocular damage, are at risk for delay in treatment due to undertriage. Our results suggest room for improvement regarding the knowledge of ophthalmic triage in general ED's in the Netherlands.

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