

I Can See Flies in My Eye and Flashing Lights- What to do?

Saqib Ali Khan Utman^{1*}, Astrid Specht² and Hanna Masud Baig³

¹University Hospitals Southampton, Southampton, UK

²Furness General Hospital, Barrow-in-Furness, UK

³University Hospitals of Coventry and Warwickshire, Coventry, UK

*Corresponding Author: Saqib Ali Khan Utman, University Hospitals Southampton, Moorfields Eye Hospital, London, UK.

Received: December 12, 2018; Published: January 22, 2019

Abstract

Objective: An Audit Based Study to ascertain the percentage of cases with serious pathology who present with symptoms of floaters and flashing lights and to determine the waiting period for consultation, source of referral and methods applied for examination.

Method: 18 Patients were selected over the period of two months in a District General Hospital and proformas were filled during a clinic consultation after informed consent of the patients.

Results: Out of total 18 patients; only one patient had retinal detachment secondary to retinal tear.

Floaters were the main symptom in the majority of the patients (15 patients).

22% patients were followed up and no retinal pathology was found.

Optician and GPs were the major source of referral.

All urgent patients were seen within 24 hrs and majority of the patients had no previous ocular history.

Slit lamp biomicroscopic examination with a 90 D lens and indirect ophthalmoscopy was preferred examination method.

Conclusions: Patients with multiple floaters, a curtain or cloud like appearance to the floaters, or hemorrhages (retinal or vitreous) at the initial examination should be reexamined within 6 weeks.

Keywords: Floaters and Flashing Lights; Retinal Pathology; Posterior Vitreous Detachment

Introduction

Floaters and flashing lights or both are frequent patient complaints with posterior vitreous detachment (PVD).

A significant proportion of patients with acute PVD develop an associated retinal tear that can lead to retinal detachment and permanent loss of vision if left untreated [1].

Up to one third of patients presenting in an ophthalmic casualty department with symptomatic PVDs may have retinal breaks or retinal detachments at the initial examination [2]. However only a few patients followed up in 6 to 8 weeks after the onset of symptoms may develop a new retinal break [3]. The follow up examinations claim considerable time and manpower, as each visit requires a detailed dilated fundus examination.

We did an audit of our patients presenting with floaters and flashing lights with following objectives a) to ascertain the percentage of serious pathology in patients with symptoms of floaters and flashing lights, b) to determine the type of patients presenting with posterior vitreous detachment requiring follow-up and c) to determine the waiting period for consultation, source of referral and methods applied for examination.

Methods

Audit was done over period of two months and 18 patients were recruited in a District General Hospital. Patients with symptoms of floaters and flashing lights were included in the study and patients who were very uncooperative during the examinations were excluded.

Audit was approved by the regional audit committee. All participating patients were consented to participate in the Audit and for data collection. Proformas were filled at the first presentation and at follow-up visit in the clinics by the examining Ophthalmologist. The data was collected and analysed by a single Ophthalmologist who was also involved for quality assurance.

Patients were examined by various grades of doctors from Senior House Officers to Consultants. Second opinion of a senior doctor was considered in patients where the diagnosis was not clear.

There was no set pattern in which the diagnostic lenses and method of examination was used.

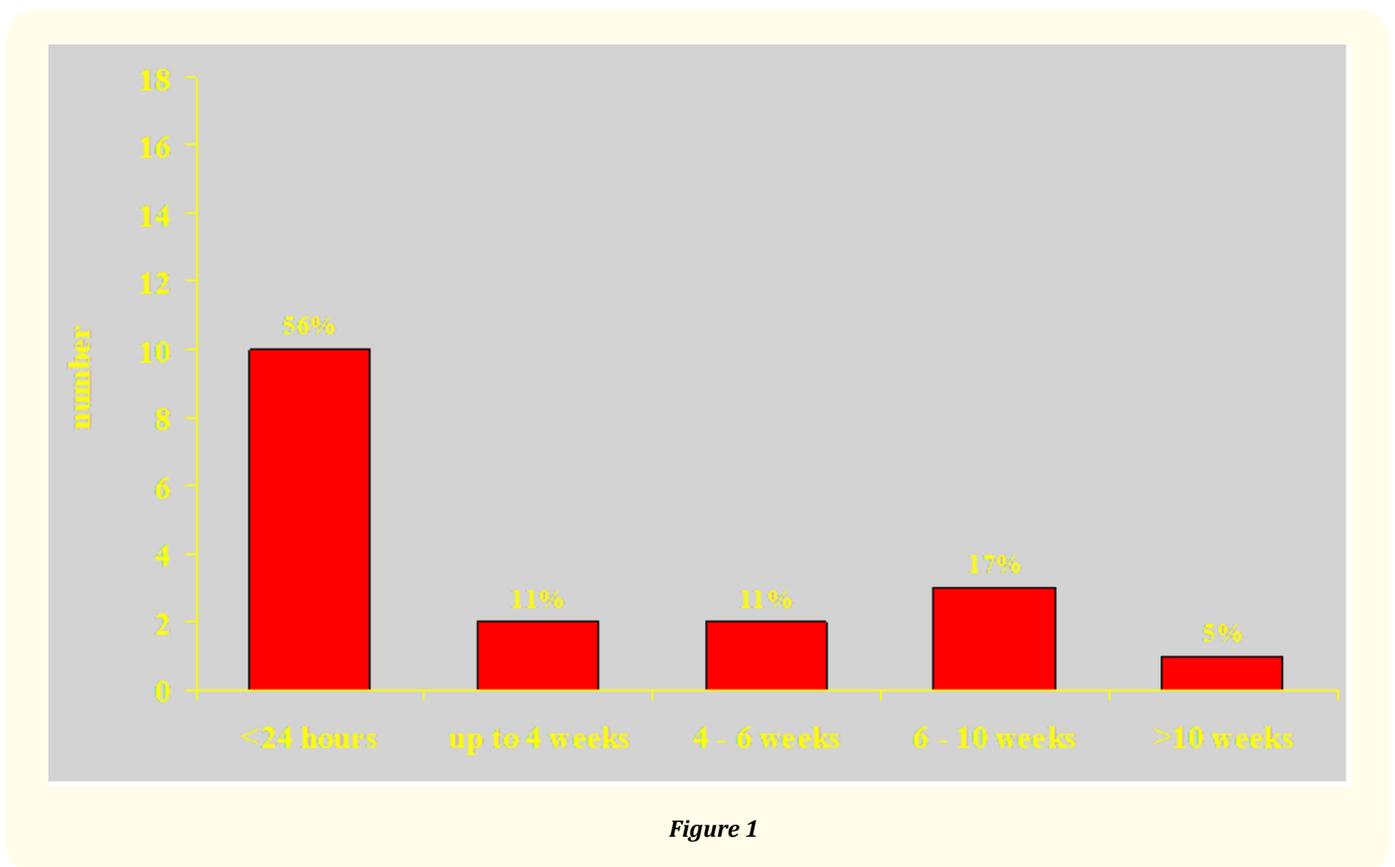
Results

General Practitioners were the main source of referral in 56% of the patients (10/18); Opticians 17%(3/18); Accident and Emergency department referred another 17% (3/18) patients; one patient (5%) presented as walk in and one patient (5%) complained of floaters and flashing lights during a clinic appointment.

Nine patients were referred with a clinical referral letter, 8 patients had telephonic referral and one patient complained during his clinical consultation.

The waiting time to be seen in the clinic was relatively short. The appointments were given according to the severity and the onset of symptoms. Patient with sudden onset of multiple floaters, large floaters, floaters associated with vitreous haemorrhage (reported by opticians) and floaters associated with decrease vision were seen within 24 hours (10/18). Patient with symptoms for more than 2 weeks were given an appointment within 6-10 weeks (7/18). Patient with symptoms more than 4-6 weeks were given a routine clinic appointment to be seen within 3 months (1/18) and subsequently found to have no retinal pathology.

Waiting time



Floaters was the most common presenting complaint of 88% of the patients (16/18) although 44% of patients (8/18) presented with both floaters and flashing lights and 17% (3/18) had additional symptoms of decreased vision.

Right eye was most commonly affected eye in 10 patients, 7 patients had symptoms in the left eye and 1 patient had both eyes affected.

The majority of the patients (12/18) maintained good vision of 6/5 - 6/9 in the effected eye/s. Visual acuity was dropped in 3 patients to 6/12 (one had a vitreous hemorrhage); one patient with floaters and vitreous hemorrhage had VA of 6/18 and other with floaters and vitreous haemorrhage had 6/36 vision in the effected eye and only one patient presented with counting fingers vision and had rhegmatogenous retinal detachment.

Out of 18 patients; 12 (66%) patients had no past history of ocular problems, 3 (17%) patients were myopes ranging from -1.5 to -5D in the affected eye and 3(17%) patients had previous cataract surgery on the affected eye.

Posterior vitreous detachment with no other pathology was the most common finding in 14 (78%) patients. 3 (17%) patients had PVD with vitreous hemorrhage and were followed up closely to exclude any late retinal pathology and only 1 (5%) patient had retinal detachment secondary to retinal tear with symptoms of floaters and flashing light of more than 2 weeks duration.

Patients with PVD with Vitreous hemorrhage, high myope and with large floater with/without tobacco dust were followed up at 2 weekly intervals for 6 weeks (4/18). No retinal pathology in these patients was found and were subsequently discharged.

Slit lamp biomicroscopic examination with a 90 D lens was preferred examination method in the majority of the patients (15/18) followed by 20D lens with indirect ophthalmoscope or 3 mirrors with slit lamp examination, if there is any doubt about the findings than second opinion from senior ophthalmologist was considered.

Method of examination

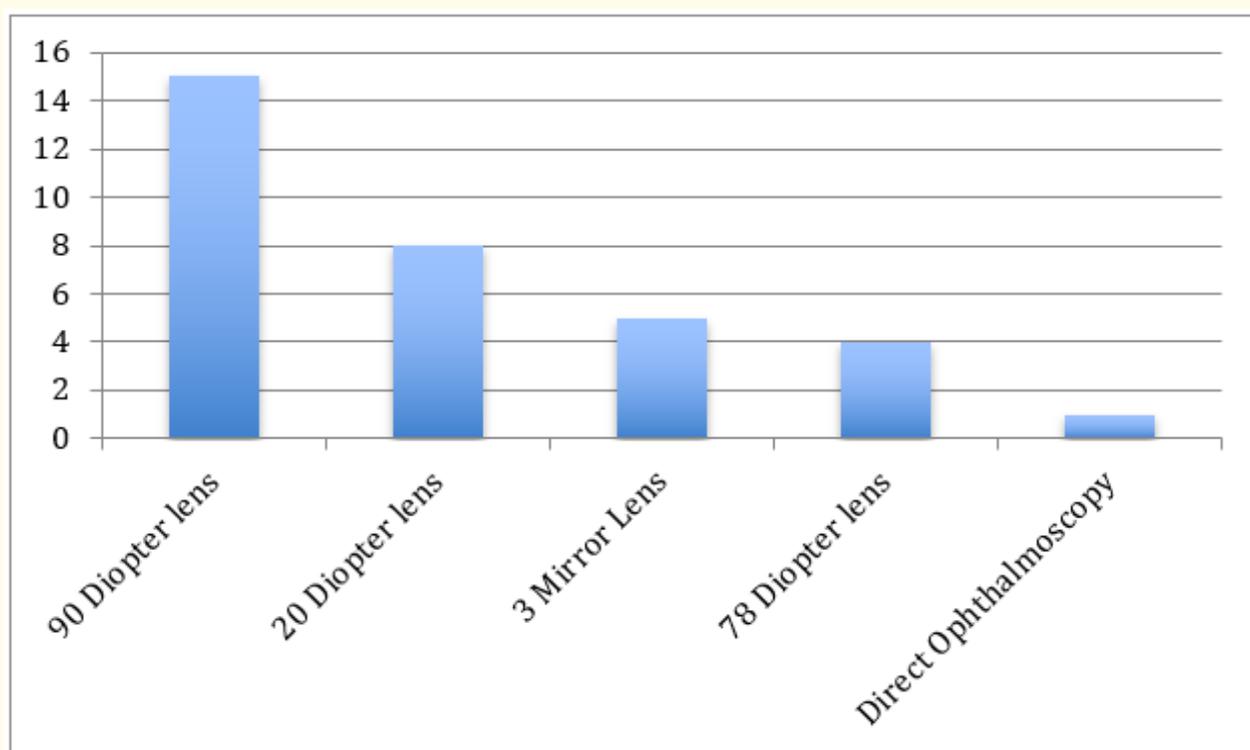


Figure 2

Discussion

Posterior vitreous detachment with or without vitreous hemorrhage was the most common findings in our patients series. The majority of our patients had no retinal pathology except one patient had retinal detachment secondary to retinal tear.

Coffee., *et al.* [4] recommended that in a patient with acute symptomatic PVD with no retinal tear at first examination with the pigmented cells in the vitreous, vitreous hemorrhage, or retinal hemorrhage should be followed up closely. We also considered close follow up in a few patients with positive findings.

We were also compliant with the findings of Sarrafizadeh., *et al.* [5] as they recommend that patients with acute, spontaneous, non-traumatic posterior vitreous detachment with dense vitreous hemorrhage have a high incidence of retinal tears and detachment therefore these patients should be closely followed up.

Majority of our patients (10/18) were seen within 24 hours time in the Ophthalmology clinic after presentation of their symptoms in the community as also recommended by Byer., *et al.* [6] that conscientious vitreoretinal examination of each patient with vitreous floaters, should be undertaken without delay.

From our findings we recommend that a full examination of the peripheral retina at the time of presentation should be performed although it doesn't prevent subsequent retinal detachment due to missed tear [4] and where fundus view is limited or patients with non-dilating small pupil; B-scan kinetic US is a noninvasive method for the detection of retinal tears and should be considered as an alternative to find serious retinal pathology [7].

Conclusions

We conclude that patients with multiple floaters, with symptoms of a curtain or cloud like appearance or hemorrhages (retinal or vitreous) at the initial examination should be reexamined frequently for 6 weeks [3] due to high risk of delayed retinal tears in such patients [8].

Conflict of Interest

Authors have no financial interest to disclose.

Ethical Issues

Local ethical approval was granted for the audit based study. Patient is consented for participation.

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Volume 10 Issue 2 February 2019

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