

**Title: Traumatic hyphema management and Mannitol role in young patients below 20 years****Authors: R.Alipanahi<sup>1</sup>, N.Lotfi<sup>2</sup>**

**Abstract:** To determine the usual approach in to current management of traumatic hyphema in young patients to evaluate the ocular complication. The charts of all patients with traumatic hyphema treated in the Department Of ophthalmology, TABRIZ Medical Science University between April 2000 and May 2002 were analyzed retrospectively. Patients with a diagnosis of rupture globe, posterior segment injury, penetrating trauma and number of hospital days lower than 3 days were excluded. Demographic and clinical information collected and patients' exam during their hospitalized, daily. 61 patients less than 20 years of age with traumatic hyphema. In activity with frequent visits to monitor and complications all patients received protective eye shields and topical and systemic steroids. Final visual acuity and rate of rebleeding. 72.4% patients studied were male and 27.6% were female. The average age of the patients was 14 years. Stone caused the majority of injures (29.3%). Most of injures happened at home (40%). 90.2% patients required only medical treatment and 9.8% required anterior chamber irrigation and medical treatment. Intra ocular pressure was higher than 22 mmHg in 31.1% patients. The incidence of secondary hemorrhage was 6.6% (4 of 61 patients). None of the patients received oral Antifibrinolytics and Aminocaproic acid as part of their treatment. Visual acuity of  $5/10$  Or better was achieved by 57.9% of patients. 22 patients ages 8 and older, that have clot less than  $1/10$  anterior chamber volume, is given osmotic agents intravenously  $0.25 \text{ gr/kg}$  in a 20% solution over a period of 3 to 5 ml per minute. In this group duration of their hospitalization was shorter than the others. Ocular trauma is the most common reason for unilateral blindness. High intra ocular pressure and low vision at the time of first examination may be associated with increased chance of rebleeding. Final visual acuity did not correlate with patient's age ( $P>0.05$ ). Patients with initially larger hyphema tended to have poor final visual acuities ( $P<0.05$ ). Initial poor vision is associated with a worse visual outcome in patients with traumatic hyphema ( $P<0.05$ ). Number of hospital days did not relate to visual outcome ( $P>0.05$ ). Within two hours after Mannitol administration clot resolved from anterior chamber. Mannitol resolved clot in patient with high or normal pressure. ( $P<0.05$ ).

**Key words:** Traumatic Hyphema, Mannitol, Complication, Rebleeding, Age, and visual acuity.

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1- Associate Professor of Ophthalmology, Tabriz University of Medical Sciences.

2- General Physician.

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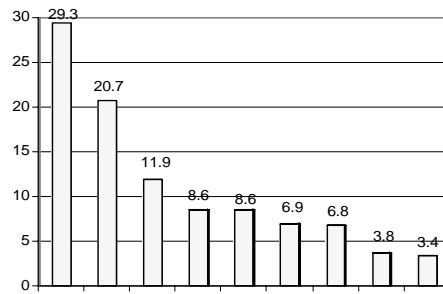
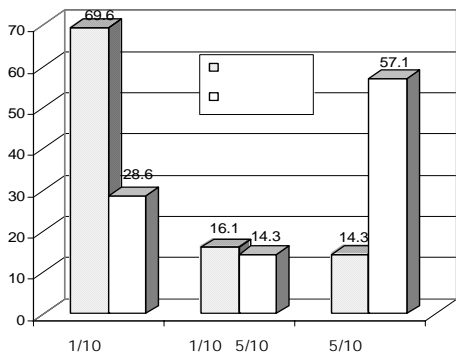


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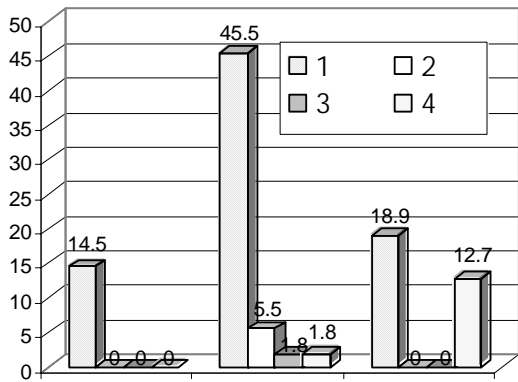
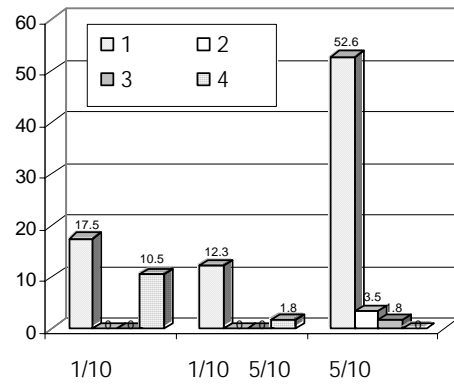
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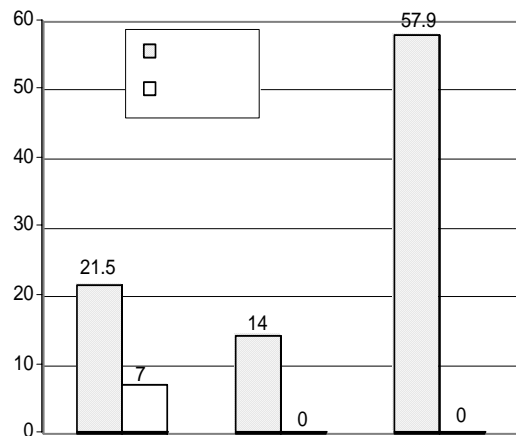
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