## **Background Information**

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- caused from penetrating trauma 4
- dyscrasias, juvenile xanthogranuloma 4

### **Case Presentation**

- 23 year old male soccer player was hit directly in the right orbital region with a soccer ball during practice
- The anterior compartment began to fill with blood in an irregular triangular shape causing the individual to lose vision in the affected eye
- Common hyphema cases present with blood beginning to pool in the bottom portion of the anterior chamber
- Regular hyphema cases have blood pooling in a fashion where there is continuity across the eye rather than an irregular shape
- The patient was sent immediately to urgent care where he was redirected to the local hospital in order to be seen by an opthamologist
- The athlete was admitted for five days in order to allow the blood to absorb by sitting in a semirecumbent position
- The individual had to be admitted in order to reduce the chances of the membrane of the eye from rupturing again and causing permanent vision loss



Figure 1: Regular Hyphema Presentation (Animated) Retrieved from https://www.allaboutvision.com/conditions/hyphema.htm

### References

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# **Traumatic Hyphema with an Irregular Presentation: A Case Study** Paquette, B., Salatel, J.: Springfield College Athletic Training Program Springfield, Massachusetts

Hyphema is a condition of blood accumulation in the anterior chamber of the eye 3 • A hyphema caused by blunt trauma is known as traumatic hyphema 1

• Hyphema is classified into four categories based on the amount of blood in the eye 2 Treatment of a hyphema can reduce the occurrence of intraocular pressure, blood deposition in the cornea, cataracts, optic nerve damage, and a reduction of visual acuity<sup>1</sup> Patients with traumatic hyphema are predominantly male with a mean age under 25 Two thirds of hyphemas result from traumatic incidents with the final one-third

Hyphema can spontaneously occur in non-traumatic cases rubeosis iridis, blood



Figure 2: Case Study Presentation Picture obtained and reprinted with permission from the patient

### Interventions

- was referred.
- Admitted for 5 days in semirecumbent position
- long periods of time
- keep his heart rate low

## **Clinical Bottom Line**

- Mechanism of injury was presented in most common form, presentation of the triangle shape blood formation in the anterior chamber was irregular.
- Triangle blood pooling shape was not seen in any literature.
- Instantaneous loss of vision was an uncommon prognosis of hyphema

• AT had initial care keeping head elevated in sitting position and

• Patient was restricted from using phone and watching tv for

• Patient was informed to minimize physical activity in order to



Figure 3: Regular Hyphema Presentation Retrieved from http://www.eyerounds.org/atlas/pages/Hyphema/

## Conclusion

- clearing visual axis
- an opthamologist



• The goal of treatment is to minimize secondary injury, decrease the chance of further loss of eyesight and to regain eyesight back

• One method of treatment calls for bedrest with bilateral patching while another method includes moderate activity with no significant differences • The most common and conservative form of treatment consists of a patient lying supine with the head

elevated to 45 degrees 3

• A 45 degree angle allows for grading and assists in

• Patients are urged to report a suspected hyphema quickly and seek appropriate medical attention from

