



CLINICAL STATEMENT

Inpatient Consults for Ophthalmology

Introduction

While ophthalmology is largely practiced in an outpatient setting, hospitalized patients from other diseases and trauma experience ocular signs, loss of vision and other symptoms of eye disease or vision-related complications. In teaching hospitals and academic medical centers, residents and fellows are frequently called upon to perform inpatient consultation. There are appropriate and, in some cases, urgent reasons for inpatient consults for ophthalmology to diagnose and manage ophthalmologic conditions for inpatients.

Evaluation of the Evidence

Carter et al reviewed the Ophthalmology Consultation Service records between July 1990 to January 1997 for 1,472 inpatients.¹ The consults were split among three services, internal medicine (39.7%), surgery (20.9%) and trauma (13.5%) and there were 92 different reasons for the consult, with the most common request was for decreased vision. The inpatient consults resulted in 166 unique primary diagnoses and 130 unique secondary diagnoses by the ophthalmologists. The most common ophthalmology diagnoses were refractive error, various forms of infections endophthalmitis should be ruled out, conjunctivitis, diabetic retinopathy and corneal abrasion.

Hasan et al evaluated the frequency of ocular abnormalities in pediatric inpatients from September 2003 to August 2004.² Of the 445 inpatient consults, 48.3% had ocular abnormalities. Dozier et al evaluated the inpatient consultations for ocular involvement by fungal organisms from June 2006 to September 2009.³ Out of 211 patients, less than 1% were diagnosed with ocular involvement from fungus. The authors suggested that routine inpatient consultation was not necessary. However, Adam et al also studied the prevalence of ocular involvement with inpatient ophthalmology consultation for fungemia.⁴ There was a low rate of ocular involvement, 4.8%, however, half of these affected patients were asymptomatic or unable to communicate. The authors concluded that funduscopy screenings could have an important role in identifying ocular involvement.

Rizzuti et al analyzed eye conditions and follow up rates of all patients evaluated by the ophthalmology consultation service from June 2003 to October 2005.⁵ The most common reason for inpatient consultations was to screen patients for manifestations of systemic conditions (18.6%). For non-trauma inpatients, the most common diagnoses were orbital/preseptal cellulitis and diabetic retinopathy. For trauma inpatients, the most common diagnoses were orbital wall fractures and subconjunctival hemorrhage.

Indications for Inpatient Consults

The list of appropriate and urgent inpatient consults for ophthalmology includes, but is not limited to:

1. Globe trauma
2. Chemical injury
3. Acute angle-closure glaucoma
4. Retinal detachment
5. Arteritic ischemic optic neuropathy
6. Central retinal artery occlusion
7. Acute ocular motor palsy
8. Microbial keratitis
9. Endophthalmitis
10. Orbital cellulitis/preseptal cellulitis
11. Unexplained loss of vision
12. Eye pain
13. Possible papilledema
14. Vision loss in patients with elevated intracranial pressure

Conclusions

There are important indications for ophthalmic inpatient consults to evaluate patients' vision and visual function. Patients in the hospital may experience aggravation of their existing ocular conditions or have an onset of a new ocular problem, e.g., pain, redness and visual loss, or manifestation of their systemic disease. Medical personnel should not hesitate to seek an ophthalmologist's evaluation and guidance when appropriate for their patients.

References

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Approvals

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