The Spectrum, Assessment, and Diagnosis of Neurovascular Ophthalmic Presentations Referred to the Acute Medical Unit in Cork University Hospital

Taqua Dahab, Raquel Mensch, Patrick Barry
Acute Medical Unit, Cork University Hospital

background

Each year a considerable number of patients are referred to the Acute Medical Unit (AMU) at Cork University Hospital with neurovascular ophthalmic presentations.

The objective of this study is to assess the patterns of those presentations and the quality of the diagnostic approach with an ultimate goal of recommending new diagnostic guidelines for these conditions.

methods

This was a retrospective survey to the medical charts and discharge letters of all patients presented to the Acute Medical Unit in Cork University Hospital with eye symptoms as a primary reason for the referral for a period of 12 months (January 2016 to January 2017).

The data collected using a proforma that has sections of the type of presentation, history and examination, investigations, other speciality consultation, and the outcome. We excluded all patients who had visual symptoms as a secondary reason for their presentation.

results

The neuro-ophtalmic presentations to the AMU constitutes around 4% of all the presentations (165 patients). The majority of the presentations were painless unilateral loss of vision (54%).

Patients presented with painful loss of vision were 7.3%, Red eye and other presentations were 6% and 37% respectively. The arteritic ischemic optic neuropathy did form the majority of the painless loss of vision. 90% got appropriate history and examination. Just over 50% had a brain scan (in form of CT Brain/MRI Brain/MRA) and a Carotid Doppler ultrasound.

Approximately 70% of the patients managed without the need of other specialties consultation. 22% discharged on aspirin and statins. However, 60% did not require any additional treatment.

review

A systemic review to the current literature showed that gold standard test to reach to the diagnosis of the majority of painless unilateral loss of vision is clinical examination together with the level inflammatory markers and ultrasonography of the temporal arteries if Arteritic Ischemic Optic Neuritis is suspected. CT brain and MRI Brain are not useful.

Our AMU is over-investigating neuro-ophtalmic presentations with low yield diagnostics tests.

conclusion

A focused clinical history and examination are often sufficient to diagnose most causes of acute monocular loss of vision. However, further investigation may be useful in certain circumstances to distinguish between different diagnoses or contribute to certain diagnoses if the index of suspicion is high enough to warrant them. Consideration of the anatomical pathways involved in vision can help the practitioner localize the lesion clinically.

Based on this study, a recommendation for the most frequent neuro-ophtalmic presentations to the AMU is made separately.

references

