Audit: Management of Papilloedema in the Acute Medical Unit (AMU)
JA Gilmour-White, W Sharif, M Yan

Introduction
Papilloedema can be defined as swelling of the optic disc caused by raised intracranial pressure.

Papilloedema is a marker of potentially serious underlying pathology: Malignant Hypertension (MH), Venous Sinus Thrombosis (VST), Site Occupying Lesion (SOL) and idiopathic Intracranial Hypertension (IIH).

Papilloedema may or may not present with symptoms – headaches, visual deficit

Papilloedema is a notoriously difficult clinical diagnosis: Ophthalmology diagnosis not confirmed or questioned and juniors often first to assess and initiate pathway

Aims
To audit the management of papilloedema in the AMU against the standard of the current local hospital pathway and published best practice:
1) Assess compliance with City Papilloedema Pathway
2) Compare practice to other standards
3) Identify specific areas for improvement
4) Provide baseline for further audit

Methods
Hospital protocol (1) & published guidelines (2) were used to create an audit pro-forma to include: patient demographic, examination, investigation, diagnosis and source of referrals.
All cases of papilloedema presenting between Oct 2014 and Sept 2015 were identified using the AMU acute admissions system. Data was collected retrospectively using the clinical database.

Results
Examinations/Investigations

CT vs MRI

Diagnoses (21)

10 = IIH
4 = Optic Nerve Drusen
2 = SOL
1 = Multiple Sclerosis
1 = Tension headache
1 = VST
2 = Unknown

Discussion
Failing/Difficult to request Venogram
2 cases involved requesting CT scan prior to fully assessing patient
5 cases showed that admitting team unaware of the current pathway
2 cases showed that CT department unable to accommodate venogram

Long delays for Lumbar puncture: averaging 40 hours post admission
• Patients admitted late at night had longer wait times for scans and reports
• Longer delays due to awaiting neurology input
• 1 case LP done by anaesthetist – delays arranging LP with anaesthetist and theatre

43% had inpatient neurology review
• Patients underwent LP without neurology input
• Referrals for outpatient neurology follow up made on discharge

Insufficient visual assessment: 52% fundoscopy, 14% acuity, 67% visual fields:
• Perception that Ophthalmologist’s fundus assessment is sufficient
• Lack of confidence in direct ophthalmoscopy
• Visual acuity and fields not performed daily, including patients with visual field symptoms

Recommendations
1) Update the current papilloedema pathway with clear time targets for each step
2) Ensure all oncall teams are aware of the papilloedema pathway through education and introduction of a proforma
3) All suspected papilloedema patients should have fundus photo with angiographic filter to identify optic nerve drusen and have ophthalmology consultant review before referral to AMU
4) Consultants on post take ward rounds to examine the fundus.
5) There should be early discussion with neurology team regarding lumboc
6) To be Re-audited in 1 year following interventions

References