Development & implementation of a local acute care pathway for the management of suspected papilloedema in the West of Scotland

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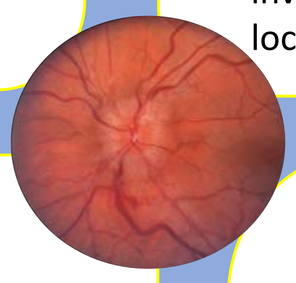
Background

- Various alarming pathologies may result in papilloedema, such as space occupying lesions (SOL), CNS inflammation, malignant hypertension, cerebral venous sinus thrombosis and idiopathic intracranial hypertension (IIH), therefore, papilloedema may represent the earliest sign of vision loss, severe neurological impairment or death.
- The adequate and prompt initial investigations of suspected papilloedema is paramount to patient safety



Methods

- Retrospective, full-cycle audit, analysing several parameters of the adequate management of papilloedema as defined by published best practice
- A clear, clinical proforma detailing the timely and adequate investigations of papilloedema was designed & delivered to the local clinical guideline repository

Aims

1. To analyse the diagnostic pathway of patients presenting with suspected papilloedema to several hospitals in the West of Scotland and audit this information with 2018 National Consensus Guidelines on Management of IIH [1]
2. To evaluate areas of improvement & implement a clinical proforma to establish an overall improvement in the management of suspected papilloedema in the West of Scotland

Conclusion

There is an overall concerning suboptimal management of suspected papilloedema in the West of Scotland, reflected by failure to achieve management targets as defined by the 2018 National Consensus Guidelines on Management of IIH

The development and implementation of acute local pathways for the management of papilloedema detailing published best practice will inevitably improve management

Implication

- Delayed confirmation or exclusion of papilloedema leads to an increase in morbidity
  - **Urgent** need for sustained & concerted efforts at local, regional and national level

Results

Parameters of Interest	▲/▼
Visual assessment by ophthalmology/experienced clinician?	▲ 3%
Visual assessment within 24 hours of identification?	▼ 11%
Visual acuity?	▲ 16%
Pupil examination?	▲ 27%
IOP measurement?	▲ 9%
Formal visual fields?	▲ 21%
Dilated funduscopic examination?	▲ 7%
Onward referral to AMU following confirmation of papilloedema?	▲ 5%
AMU referral within 24 hours of confirmation?	▲ 3%
Exclusion of malignant hypertension?	▲ 4%
Cranial nerve assessment?	▼ 1%
CT/MR Brain within 24 hours of confirmation?	▲ 22%
CT/MR Venography within 24 hours of confirmation?	▲ 1%
Lumbar puncture?	▲ 4%
Opening pressure?	▲ 4%
CSF glucose?	▲ 9%
CSF protein?	▲ 9%
CSF cell count?	▲ 9%
Follow-up visual assessment?	No difference

Future Work

- Trust level establishment and regular audit of local acute pathways for suspected papilloedema
- Feedback to referring healthcare professionals emphasising the importance of urgent referral of all patients with suspected papilloedema to an appropriate acute pathway.
- Feedback to acute clinicians to ensure seamless and efficient patient journey along a dedicated suspected papilloedema pathway, which could be facilitated through:
  - Direct ophthalmoscopy teaching to improve confidence in fundus examination amongst receiving medical staff.
  - Encouragement of thorough neurological assessment, including full cranial nerve examination, appropriate neuroimaging and adequate CSF analysis.

About the author

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References

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