

# Suspected Papilloedema/Raised ICP Pathway

Raised intracranial pressure is suspected not just based on headaches but when accompanied by other objective symptoms and signs \*

**Document the following**

- 1) History \*-refer to info box
- 2) Weight in kg and BMI, blood pressure, pregnancy test if relevant
- 3) Full visual assessment (visual acuity using Snellen's, fundoscopy, visual fields, eye movements)
- 4) Neurological examination

**WITHIN 24 HOURS- as inpatient or urgent day case in the acute care trust. Admit urgently to your hospital if vision affected**

**Ophthalmology assessment**  
(to be repeated for comparison at every follow up)  
Record visual acuity, intraocular pressure, formal visual fields, dilated fundoscopy, OCT.  
Urgent senior review if uncertainty

**CT brain + venogram**  
OR  
**MR brain + venogram**

**NORMAL SCAN #**

**NO PAPILLOEDEMA**

**CONFIRMED PAPILLOEDEMA**

**ABNORMAL SCAN #**

- If headaches, diagnose primary headache syndrome and manage as per Walton centre secondary care headache pathway ^
- Ophthalmology follow up if indicated
- Unlikely to need neurology input

**Inpatient Lumbar puncture (LP)**  
within 24 hours (opening pressure is measured in the recumbent position and send full CSF analysis) ~

**Discuss urgently with on call neurologist or neurosurgeon**  
(e.g. Tumour, venous thrombosis)

CSF opening pressure <25 cm, Normal CSF constituents

CSF opening pressure ≥25 cm, Normal CSF constituents

Any CSF pressure with **Abnormal CSF constituents**

**Less likely to be papilloedema**  
Reassessment by ophthalmology for alternative causes of disc swelling like optic neuropathies or vascular causes. Keep as inpatient if vision affected and discuss with neurology and ophthalmology

**Typical patient for IIH<sup>+</sup>**

**Not typical patient for IIH<sup>+</sup>**

**Consider alternative causes**

- Infection, inflammation, malignancy, systemic disorders
- Discuss with on-call neurologist

**DIAGNOSE IIH**

**+ Definitions**  
Typical IIH= females of childbearing age with a BMI >30 or recent weight gain  
Not typical for IIH= not female, not of childbearing age, low BMI, no recent weight gain, systemically unwell, active malignancy/immunocompromised

**IIH (Idiopathic Intracranial Hypertension) Diagnostic Criteria**

- A = Papilloedema
- B = Normal neurological examination (except 6<sup>th</sup> nerve palsy)
- C = Normal brain parenchyma
- D = Normal CSF constituents
- E = Elevated CSF opening pressure of ≥25 cm CSF

**\*History**

- Description of new headache
- Visual obscurations (transient loss of vision on Valsalva manoeuvres or change in posture)
- Pulsatile tinnitus
- True diplopia

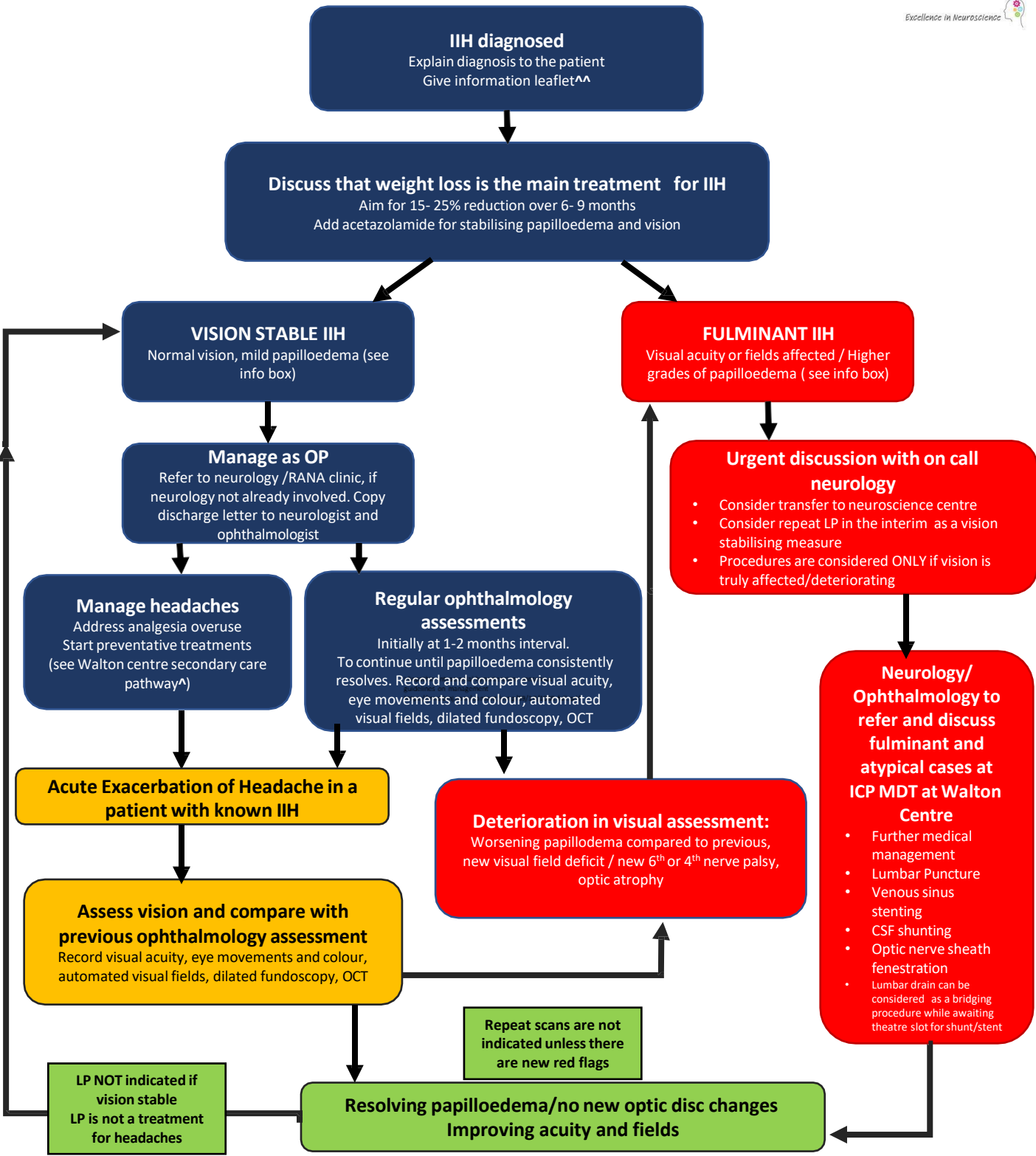
Previous migraine headaches  
Regular and new medication  
Recent change in weight

[^https://www.thewaltoncentre.nhs.uk/pathways.htm](https://www.thewaltoncentre.nhs.uk/pathways.htm)

**#** Venous stenosis, empty sella, optic nerve sheath distension are NOT abnormalities nor diagnostic features on their own. These are very frequently associated with raised ICP and also seen in normal population

**~**Normal CSF opening pressure in the recumbent position is between 9-25 cm of CSF. At LP, take off enough CSF for analysis and bring closing pressure to around 15- 18 cm of CSF

# Idiopathic Intracranial Hypertension (IIH) Pathway



| Vision Stable IIH                                    | Fulminant IIH/ Affected vision |
|--|--------------------------------|
| Normal visual acuity                                 | Reduction in visual acuity     |
| Normal visual fields (except increase in blind spot) | Abnormal visual fields         |
| Normal colour vision                                 | Affected colour vision         |
| Grade 1-2 papilloedema                               | Grade ≥3 papilloedema          |

<sup>^</sup><https://www.thewaltoncentre.nhs.uk/pathways.htm>  
<sup>^^</sup><https://www.thewaltoncentre.nhs.uk/patient-leaflets/diopathic-intracranial-hypertension-iih/620862>

Acetazolamide- contraindicated in pregnancy and severe renal dysfunction; very common to have transient pins and needles in the initial stages of therapy which is not a cause for concern.

The Walton Centre 'Suspected papilloedema/raised ICP and IIH pathway' compiled by Megan Prewett  
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Idiopathic intracranial hypertension: consensus guidelines on management: <https://innp.bmi.com/content/innp/89/10/1088.full.pdf>