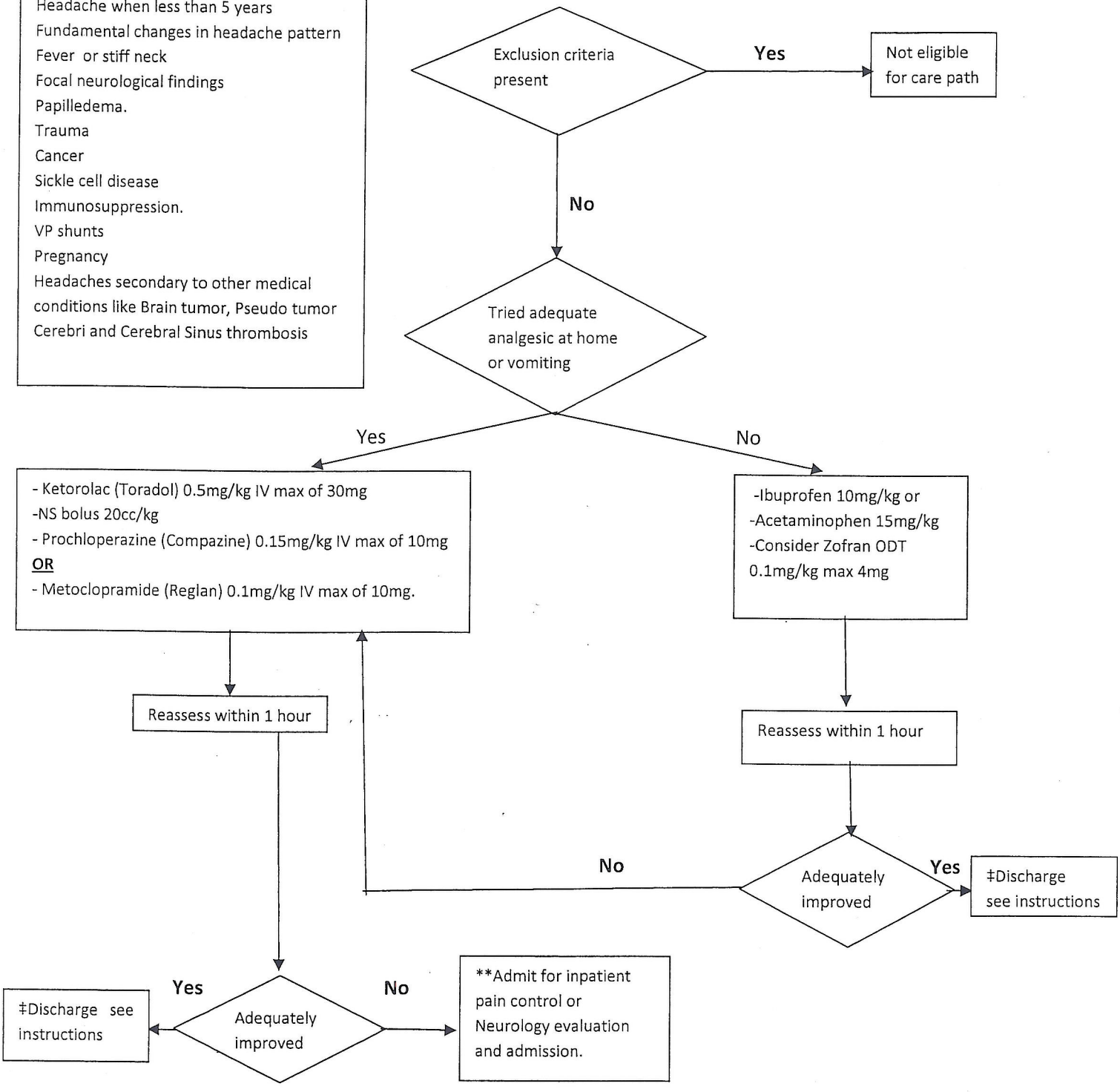
Headache care path

Exclusion criteria

Altered mental status
Headache when less than 5 years
Fundamental changes in headache pattern
Fever or stiff neck
Focal neurological findings
Papilledema.
Trauma
Cancer
Sickle cell disease
Immunosuppression.
VP shunts
Pregnancy
Headaches secondary to other medical conditions like Brain tumor, Pseudo tumor Cerebri and Cerebral Sinus thrombosis



** See admission criteria

‡Refer to neurology clinic for follow up or assessment of home treatment and prophylaxis plan

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Admission Criteria

- Severe headache unresponsive to ER intervention
- Persistent nausea and vomiting with severe headache

Discharge instructions

- Patient to make appointment with PMD within 48 hours for follow up
- Refer to Neurology clinic for refractory or recurrent headache
- Keep Headache diary
- NSAIDS prescription given

Pseudo tumor Cerebri is characterized by ↑ ICP, papilledema, normal CSF and CT/MRI images, normal consciousness. Patients may complain of nausea, vomiting, transient visual symptoms. May be associated with obesity, and OCP, vitamin A, tetracycline, thyroid disorders. May lead to blindness. Identifying papilledema and abnormal CSF opening pressure. (greater than 20 mm hg) is characteristic. Consult neurology and ophthalmology .Oral acetazolamide and L.P are therapeutic.

Cerebral Sinus thrombosis- this diagnosis should be considered in patients with recent unusual headache or with stroke-like symptoms in the absence of usual vascular risk factors. Patients have worsening or severe headache, hemiparesis, aphasia and other neurological findings, seizures, altered mental status, or even fever .Risk factors are listed below. Diagnosis is by CT or MRI. Treatment involves stabilizing patient, preventing herniation .May need mannitol, or decompressive surgery. Patient will require anticoagulation.

Brain Tumor –The characteristic headache is worse in the morning and associated with nausea and vomiting. There may be abnormal neurological signs. In younger children the tumors are mostly infratentorial and they present with symptoms of ↑ICP. Hydrocephalus, C.N palsies, ataxia, head tilt, neck stiffness, diplopia or strabismus may all present in a younger child. MRI is diagnostic.

Cerebral Sinus thrombosis risk factors - Genetic prothrombotic conditions – Protein S&C deficiency, Homocysteinemia,
Acquired prothrombotic states- Nephrotic syndrome, Antiphospholipid antibodies, Homocysteinemia, Pregnancy, Puerperium. Infections - Otitis, mastoiditis, sinusitis, Meningitis, Systemic infectious disease. Inflammatory disease – S.L.E, Inflammatory bowel disease, Drugs like OCP, Hematologic conditions – polycythemia, leukemia, thrombocytopenia, Head injury and dehydration.

References

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4. Lewis, D., et al., *Practice Parameter: Pharmacological treatment of migraine headache in children and adolescents: Report of the American Academy of Neurology Quality Standards Subcommittee and the Practice Committee of the Child Neurology Society.* Neurology, 2004. **63**(12): p. 2215-2224.
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