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Clinical Problem	MRI Indication	Condition for Indication
Spine: 1. Cervical spine:	Indicated	Imaging is only indicated when there are neurological signs
Neck pain, brachialgia, degenerative change		or symptoms, or if pain persists after conservative management for more than four weeks.
2. Possible atlanto-axial instability	Specialized Investigation	If 'XR' is unable to confirm diagnosis and the neurological symptoms persist to show cord damage secondary to chronic atlanto-axial instability.
3. Lumbar spine : Lower back pain	Indicated in special circumstances	If imaging is indicated, MRI is the best modality. Imaging is only indicated if there are "red flag" indications:
		In patients with suspected uncomplicated herniated disc or spinal stenosis imaging is only indicated after an unsuccessful 4- 6 week trial of conservative management
		If there is clinical concern about an epidural abscess or hematoma which may present with acute pain but no neurological symptoms, urgent imaging is required.
		Suspected cancer Suspected infection. Cauda equina syndrome Severe/progressive neurologic deficit Suspected compression fracture
4. Thoracic Spine: Pain without trauma	Indicated only in specific circumstances	If there is clinical concern about an epidural abscess or hematoma which may be present with acute pain but no neurological symptoms, urgent MRI imaging is required. Imaging is otherwise only indicated when there are neurological signs or symptoms, or if pain persists after conservative management for more than four weeks
5. Myelopathy	Indicated	MRI is the best imaging modality for evaluating suspected spinal cord lesions and possible cord compression.
6. Suspected discitis or vertebral osteomyelitis	Indicated	MRI is the best imaging modality for evaluating suspected discitis or osteomyelitis.
Head and neck:		
1. Orbital lesions	Specialized investigation	MRI is the modality of choice for investigating problems such as proptosis.
2. Hyperpara-thyroidism	Specialized investigation	MR may be useful where the parathyroid scan is negative and to improve localization of parathyroid adenoma.
3. Neck mass of unknown origin	Indicated only in specific circumstances	MRI could be to determine the full extent of large lesions is not fully visualized by US.
4. Salivary obstruction		, ,

	Indicated	Imaging is indicated to assess possible salivary obstruction in patients with intermittent, food-related swelling. The choice of imaging depends on local experience and expertise.
5. Salivary mass	Specialized investigation	If extension into deep spaces of the neck is suspected, MRI or CT should be carried out.
6. Temporomandibular joint dysfunction	Specialized investigation	MRI is the best imaging modality to show internal derangement of the temperomandibular joint, but it should only be ordered by a specialist or after consultation with a radiologist.
Central nervous system:		Ŭ
1. Congenital disorders of the brain	La Parta d	
2. Acute stroke	Indicated	MRI is the best imaging modality for all malformations of the brain.
	Indicated	Modern treatment protocols require CT or MRI at the earliest possible time in all cases of suspected stroke in order to allow initiation of treatment as soon as possible. MRI is a problem solving tool. It is particularly helpful in the evaluation of posterior fossa stroke.
3. Transient ischemic attack (TIA)	Specialized investigation (MRA)	Urgent vascular imaging with MRA can help to guide patient management.
4. Multiple sclerosis and other white matter disease	Specialized investigation (MRA)	Urgent vascular imaging should be performed in all cases of high-risk TIA.
5. Headache: chronic / recurrent	Indicated	MRI is the best imaging modality for diagnosis and follow-up of multiple sclerosis and for investigating other forms of white matter disease.
6. Headache: low pressure	Indicated only in specific circumstances	In the absence of focal features imaging is not often helpful. The following features significantly increase the likelihood of finding a major abnormality and justify requesting diagnostic imaging: • Recent onset and rapidly increasing frequency and severity of headache • Headache causing the patient to wake from sleep • Associated dizziness, lack of coordination, tingling or numbness, new neurologic deficit • New onset of a headache in a patient with a history of cancer or immunodeficiency MRI provides more detailed images of the brain than CT
7. Pituitary and juxtasellar problems	Specialized investigation	In the presence of intermittent headache happening when upright and disappearing while recumbent, MRI is the best investigation. If there is a clinical indication

		for determining the site for a CSF leak, cisternography can be performed using MRI, CT or NM.
8. Posterior fossa signs	Consisting discontinution	If vision is deteriorating the averagination should be
9. Hydrocephalus, suspect shunt malfunction	Specialized investigation	If vision is deteriorating the examination should be done as soon as possible. CT can be used if MRI is unavailable or contraindicated.
10. Middle or inner ear symptoms (including vertigo)	Indicated	MRI is the imaging modality of choice.
	Indicated	MRI is effective and has no radiation dose.
11. Sensorineural hearing loss		
12. Dementia and memory disorders, first-onset psychosis	Specialized investigation	Referral to a specialist should precede imaging, as these symptoms requires ENT, neurological, or neurosurgical expertise.
13. Acute visual loss: visual disturbances	Specialized investigation	Referral to a specialist should precede imaging.
	Specialized investigation	This is the most sensitive and specific imaging modality to exclude treatable causes.
14. Epilepsy (adult)		
	Specialized investigation	Specialist can diagnose many cases without imaging. However, if imaging is indicated, MRI is the best imaging modality.
	Specialized investigation	Imaging is not required in patients with idiopathic generalized epilepsy. If imaging is clinically indicated, MRI is the modality of choice.