

SPOTLIGHT:
INCIDENTAL MRI FINDINGS

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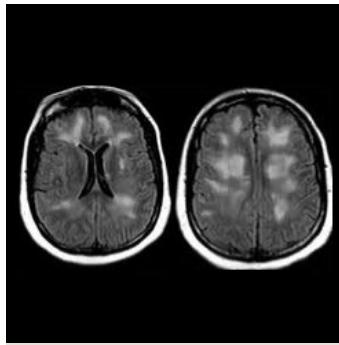
Neurosurgeon and Endovascular Neurosurgeon

MOST COMMON FINDINGS NEEDING **NO REFERRAL**

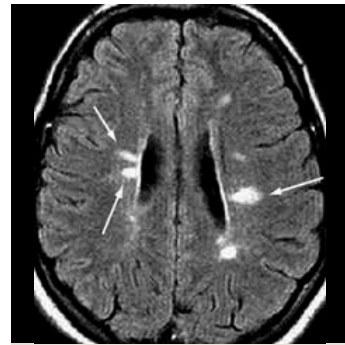


Sinusitis

Unless symptomatic and not responsive to simple measures.



Age changes or 'white matter changes'. Advise re: cholesterol, BP, smoking and not to worry unless symptoms of impaired cognition.



Possible demyelination

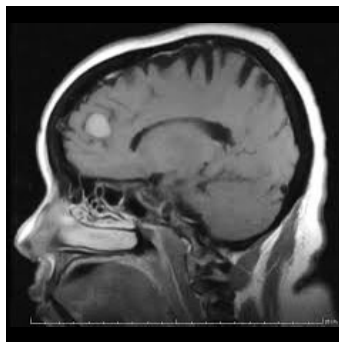
If asymptomatic refer to a neurologist, non urgently.

MOST COMMON NEEDING **PROBABLE REFERRAL**

Extra axial tumours

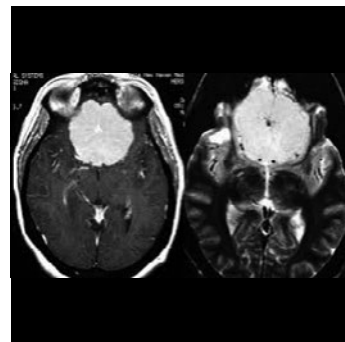
Indications for urgent referral:

- Compressing optic nerve, or brainstem.
- Oedema on report
- Persistent headaches



Tiny meningioma (benign tumour of dura)

No treatment needed but non urgent referral.



Massive meningioma

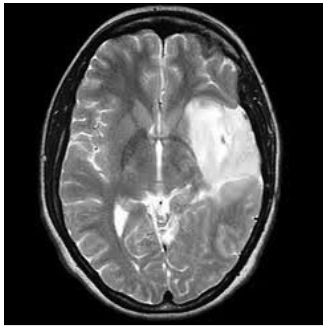
with possible visual changes - urgent referral.

DID YOU KNOW?

- 82% of MRI results are normal
- While 18% show incidental abnormal findings, 15% require no referral

Reference: JAMA. 1999;282(1):36-39.
doi:10.1001/jama.282.1.36

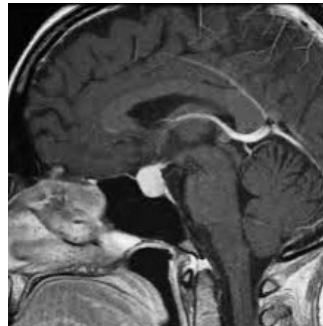
MOST COMMON FINDINGS NEEDING URGENT REFERRAL



Intra axial tumour example: Low grade astrocytoma

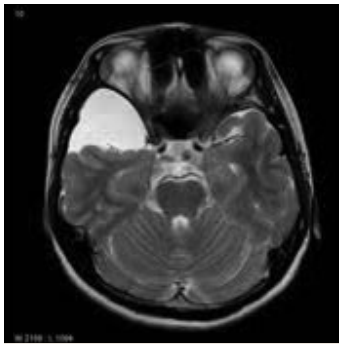
Intra axial tumours

- Most 'incidental' will be low grade
- All need referral
- Mass effect indicates urgent referral e.g. midline shift, compression lateral ventricle etc



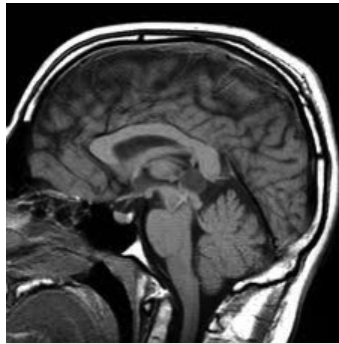
Pituitary tumour

or pituitary enlargement. If enlargement compressing optic nerves - even if vision normal - urgent referral. Endocrine issues should be explored, usually blood tests needed and/or endocrine referral also.

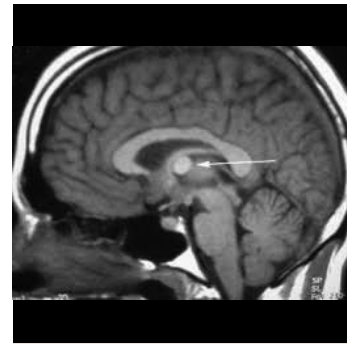


Arachnoid cysts

1.4% prevalence in adults. Usually no treatment unless the patient has a headache thought to be related.



Pineal cysts Also seen in 1.5% of individuals. Usually only consider treatment if >1cm, and causing headaches definitely related.



Colloid cysts

Urgent referral if headaches present, or ventricles enlarged. Usually only treated if >1cm.



Aneurysms

- 1/200 incidence on scans
- Almost always asymptomatic
- Size is the major determinant of risk, and increases at 7mm for anterior circulation, *but* 3mm for posterior circulation
- Even tiny aneurysms can rupture
- Less invasive treatments e.g. coiling are available
- Urgent referral if >4mm
- Less urgent opinion if smaller
- Reassure patients that they are not a 'time bomb.'

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- Fax 02 9383 1450, or
- Email surgery@neurosurgeon.com.au