

## Scan Requests

Scan reports are very dependent on the information provided by the requesting clinician. Key details about the patient should include: age, duration of memory problems, symptom progression, presence or absence of vascular disease (cerebral, coronary and peripheral) and associated neurological symptoms. The requesting clinician should also seek specific clarification on the presence of medial temporal lobe (hippocampal atrophy), significant vascular ischaemic change and the presence of other intracranial pathology such as tumours.

An example request:

"80 year old with 3 year history of short term memory difficulties. Vascular risk factors include history of hypertension. Need to clarify the presence of significant vascular ischaemic changes, medial temporal lobe atrophy (hippocampal atrophy) or space occupying lesion."

## Scan Reports – notes for radiologists

To maximise the diagnostic value of the scan it is important that the imaging is interpreted by a radiologist experienced in the field. This is particularly true of MRI studies as their interpretation can be difficult.

Useful comments in a scan report of a patient suspected of having dementia would be the presence or absence of:

1. Vascular changes - some form of quantification of cerebrovascular disease is helpful. This should include the presence of lacunar infarcts, established cortical infarcts and small vessel disease that is disproportionate for age.
2. Early parietal lobe and medial temporal lobe (hippocampal) atrophy. These are known bio-markers of Alzheimer's disease.
3. Any evidence of disproportionate atrophy affecting other areas of the brain e.g. frontal lobes. These may suggest dementia of other subtypes e.g. fronto-temporal dementia.
4. The presence (or absence) of other intracranial pathology and its likely significance. Incidental pathology is often discovered on CT scans in particular meningiomas. These are usually benign and asymptomatic. They generally require

no treatment other than periodic monitoring but it is important to clarify the local protocol for referring such tumours to the neurosurgeons. An urgent specialist opinion is warranted if they are large, show compressive features or if there is associated cerebral oedema.