

Improving the Neuropsychiatry/Neuroradiology MRI MDT Meeting – is this an effective, safe and acceptable contribution to patient care?

Results of an audit and quality improvement project

Rebecca Howard, CT3 Psychiatrist, Department of Neuropsychiatry, Maudsley Hospital, UK
Daisy Tulloch, MSc Student, Institute of Psychiatry Psychology and Neuroscience, King's College London
Daniel Davies, CT3 Psychiatrist, Neuropsychiatry Outpatients, Maudsley Hospital, United Kingdom
Alastair Santhouse, Consultant Neuropsychiatrist, Neuropsychiatry Outpatients, Maudsley Hospital, United Kingdom
Simon Harrison, Consultant Neuropsychiatrist, Neuropsychiatry Outpatients, Maudsley Hospital, United Kingdom

BACKGROUND

- We run a weekly Neuroradiology MDT lasting 60 minutes, chaired by a consultant Neuropsychiatrist, with scans reviewed with a consultant Neuroradiologist
- Cases are presented for discussion and review, both by clinicians within the Neuropsychiatry department and by 'guests' from referring services

AIMS

- To evaluate *clinical usefulness* of our neuroradiology meeting
- To understand the *types of clinical cases* discussed in a Neuropsychiatry Neuroradiology MDT
- To understand barriers to referral, and *improve access* to our service

Ederle's paradox: *the longer the case presentation, the fewer abnormalities on the scan*

METHODS

- Data collected prospectively between 12/08/2025-03/02/2026:
 - Presenter name and team
 - Details of case presentation/clinical question
 - Imaging findings and discussion
- Presenters were identified from this collected data and emailed an anonymous survey requesting feedback on accessibility, clinical usefulness and whether they would refer again to the meeting
- Domains were assessed on a Likert scale, with free text options for qualitative feedback.

RESPONDENT RESULTS

- 12/27 responses received (44%)
- 50% neuropsychiatry, 50% guest

Descriptive statistics

Number of meetings	20
Number of cases discussed	142
Cases per meeting (median, range)	7, 3-11
Guest case presentations	16
‘Normal’ scan reported	23
Presentations with no associated images	19

Primary indication of case discussion

Cognitive impairment	20
TBI	19
Seizures	13
ICH/Stroke	11
Alcohol related brain damage	9
Malignancy	9
MS	8
Infective/inflammatory	6
Neurodegenerative process	6
Hypoxic brain injury	5
Primary psychiatric symptom	5
Collapse	4
Movement disorders	4
Confusion	2
Other neurological symptoms	2

POSITIVE FEEDBACK

- 100% of respondents rated the meeting 'very easy' to access administratively
- 66.6% rated discussion as 'very useful', with the remaining 33.3% rating 'somewhat useful'
- 42% rated the written summary as 'very useful'
- 75% said that discussion changed their future management plan
- 100% would bring future cases to the meeting

SCOPE FOR IMPROVEMENT

- Some respondents (33.3%) did not receive a written summary
- Referrals redirected to the meeting may not add new clinical information in cases with established negative imaging

NEXT STEPS

- Consideration of formalized proforma for meeting discussions
- Addition of a separate referral option for discussion at the meeting on our service referral form may avoid unnecessary discussions

"helpful and clear recommendations for investigation and follow up"

"helpful to have in depth neuroradiology opinion on structural changes, how significant they might be..."

"it has helped clarify or exclude diagnoses... what to focus on in treatment as the primary strategy... further imaging to do and when... It has just helped to confirm that our team were doing the appropriate thing and had considered all options"

"easy to access it, don't need to wait, low admin"

"clinically useful, educational and enjoyable weekly meeting"

"there were no significant MRI findings and with only a brief case presentation & discussion, new light wasn't shed on the case... We had initially referred for a neuropsychiatry outpatient appointment which would have been more appropriate"

DISCUSSION

- Wide range of neurological and psychiatric disorders discussed
- Response rate to survey was low, however feedback was broadly consistent
- Data suggests demand for specialist neuropsychiatry/neuroradiology MDT discussion and clinical usefulness of this meeting, with consistent uptake from referring teams outside of neuropsychiatry
- Narrative feedback following appointment of a neuropsychiatry consultant meeting chair suggests improvement of high-quality summaries circulated after the meeting