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## Can frozen section diagnoses be used to counsel patients in Neuro-oncology prior to discharge?

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**Statement of the Problem:** Frozen/fresh smear diagnoses are a well-established process for guiding neurosurgeons operatively with the resection of gliomas. However, often patients have to wait for a number of weeks to hear what their diagnosis is. A frozen section/ fresh smear result can help teams to counsel patients prior to discharge. This audit aims to examine the ability of frozen section biopsy to predict the final histological diagnosis in patients undergoing biopsies for intracranial lesions. Radiological diagnosis was also compared to final histological diagnosis as an interesting comparison

This audit was a retrospective analysis of clinical data. Data were obtained from electronic records of 536 patients over a one year period, undergoing various neurosurgical interventions for intracranial lesions. The data was analysed and results assessed with % calculation to establish congruence, sensitivity, and specificity of frozen section and radiological diagnosis with respect to final histology.

The percentage of congruence between frozen section (FS) and final histology was 95.31 and between radiological diagnosis (R) vs final histology 93 (figure 2). Sensitivity (Se) and specificity (Sp) for FS with malignancy were both 0.89. For R in malignancy it was 0.88 and 0.94 respectively. FS for astroglial tumours Se 0.96, sp 0.97. R for astroglial tumours Se 0.98, sp 0.94 (Figure 1).

There is a high degree of congruence between frozen section diagnosis and final histological diagnosis. Frozen section diagnosis may be used to aid teams in counselling patients before their discharge and plan follow up appointments in oncology services considering that the mentioned diagnoses have more than 95% chance being accurate.

## Biography

Oscar MacCormac is currently studying in Imperial College Healthcare NHS Trust, UK. He has published his original research work in peer reviewed and reputed journals and also participated into several scientific meetings.

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