Response: Brain military enhancement

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We thank Rice et al. for sharing their opinion with regard to the role and safety of brain biopsy in clinical diagnostic management of patients after reading of our paper.

In our paper, we describe multiple diseases that may present with military enhancement on brain MR images after intravenous contrast, some rare and some more frequently encountered. Within this summary, we also describe the variable

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efficacy of corticosteroid treatment on MR abnormalities as a possible consideration within a diagnostic paradigm and, as supported by previous papers, we describe the possible strong response of lymphoma to corticosteroids.

However we did not intend to describe nor want to advocate the strategy that, in case lymphoma is suspected in a patient, a trial of corticosteroid therapy should prevail before brain biopsy as we are very aware of the possible complications for histopathological examination as rightfully mentioned by Rice et al.

Within the text of our paper, we used in context of brain biopsy the term “last resort” which may dramatize the procedure of brain biopsy possibly too much, and we also agree that with current imaging and surgical techniques complication risk is acceptable when the high diagnostic yield is considered. However, we do want to stress that biopsy of the brain should only be considered when anamnesis in combination with other less invasive diagnostic procedures fail, especially in case of these very small biopsy targets.

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Compliance with ethical standards

Conflict of interest FB is supported by the NIHR Biomedical Research Centre at UCLH. All other authors have no conflict of interest.

Ethical approval All procedures performed in the studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed consent This was not a research study and, therefore, informed consent was not required.

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