Reviewer's report

Title: Pyogenic brain abscess, a 15 year survey

Version: 2 Date: 22 August 2012

Reviewer: Arivazhagan A

Reviewer's report:

The authors have described the experience of management of cerebral abscess in a tertiary hospital over 15 years.

Major comments:

1. The study addresses in a descriptive manner the management of cerebral abscess over 15 years. However, the objectives of the paper namely the identification of delay in management and the outcome are not properly addressed.

2. The authors report delays due to diagnosis, referral and surgery. However, the factors contributing to each of them and possible reasons for delay in surgery after radiological diagnosis are not clear.

3. The analysis of outcome in relation to preoperative administration of antibiotics revealed that the outcome of patients receiving antibiotics before surgery compared to patients who first were initiated on treatment at surgery appeared inferior (GOS# 3, 33% vs 11%, p=0.011). The authors state that, there was, however, no association between outcome and administration of pre-surgical antibiotics when adjusted for CRP at admission. The authors have not demonstrated the effect of CRP levels in outcome in the first place and have not explained further why a correction for CRP was considered.

4. The study can be strengthened by attempting to identify the trends in incidence and management over the study period of 15 years.

Minor comments:

The study lacks in clarity in a number of features on management namely the decision making on craniotomy/ aspiration; continuation of antibiotics; use of steroids. These can be explained by the retrospective nature of the study, however, it weakens the study.

The authors should discuss the reasons for providing antibiotics for less than 6 weeks in a cohort of patients, while continuing the same for a longer time in others. As mentioned by the authors, it does not appear to be related to the excision of the abscess.

Level of interest: An article whose findings are important to those with closely
related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.