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Letter to the Editor

Intracranial haemorrhage in dural arteriovenous fistula

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I read the article by Brzozowski *et al.* about the percentage of intracranial haemorrhage in type I dural arteriovenous fistula with great interest [1]. In the paper, the authors demonstrated that 50% of patients with dural arteriovenous fistula presented with intracranial haemorrhage. However, the results of the paper were not concordant with the already published data in some larger studies (n = 236-1075), which have demonstrated a risk of intracranial haemorrhage between 12% and 23.7% [2-5] (Table 1). In the paper published by Li *et al.*, only two cases out of the reported 91 with Borden type I (Cognard type I and type IIa) dural arteriovenous fistulas presented with an intracranial haemorrhage, as compared to 28.6% in the authors' paper. The sample size of the study and the inclusion of only those patients who were managed with embolisation probably contributed to this discrepancy.

Table 1. Review of literature on the presence of intracranial haemorrhage in patients with dural arteriovenous fistula

Paper	Number of patients	% of patients presenting with haemorrhage	% of patients presenting with haemorrhage in Cognard type 1 dural arteriovenous fistula
Li *et al.*	236	23.7% (n = 56)	3.6% (n = 2)
Hiramatsu *et al.*	1075	12.0% (n = 129)	–
Piippo *et al.*	261	13.0% (n = 34)	–
Singh *et al.*	402	18.0% (n = 72)	–

Disclosure

The author declares no conflict of interests.

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