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Letter to Editor

Response to the Letter ''Future challenges of stroke treatment''

Authors of the Letter ''Future challenges of stroke treatment'' [1] discuss our article reviewing and meta-analyzing available data on therapeutic interventions for acute basilar artery occlusion (BAO) [2]. We are honored to notice that this work is being found valuable and generates further important reflections and ideas on the problem of BAO management.

Available empirical data on the treatment of BAO that we had found in the literature, and then reviewed and meta-analyzed in our paper, are indeed poor. These original studies are of low quality in the sense of Evidence Based Medicine rules, which is, however, at least partially related to the ''external'' difficulties around the management of BAO. Organization of any larger randomized multicenter, statistical power-sufficient, clinical trial in this condition is more challenging than investigating acute MCA occlusion interventions due to various technical, epidemiological and clinical issues. On the other hand, little data on the i.v. rtPA (easy and commonly used therapy in stoke units) for BAO were disappointing also for us while preparing the initial review.

Since our meta-analysis completion, several studies have been published adding significant empirical data to the initial work (Table 1), however, they still do not include any randomized clinical trials. First results of the latter will be probably released not earlier than in a couple of years, as the authors of the Letter comment. Therefore, we consider to update our meta-analysis with all newly published studies in the near future to keep providing a topical scientific background for clinical decisions still bearing in mind all limitations of the available data and specificity of a meta-analysis as a form of data generation – any interpretation of its results requires detailed knowledge on the criteria that had governed selection of the original studies.

Table 1 – Please see the explanation in the text of the commentary.

Reference	Study design	Sample size
Alonso De Leciñana et al. [3]	Observational; multicenter; prospective registry	52
Pereira et al. [4]	Observational; single-center; retrospective	11
Hu et al. [5]	Observational; single-center; retrospective	24
Uno et al. [6]	Observational; single-center; retrospective	34
Dias et al. [7]	Observational; single-center; retrospective; prospective stroke registry	63
Wen et al. [8]	Observational; single-center; prospectively collected database	19
Lee et al. [9]	Observational; single-center; retrospective	62
Gory et al. [10]	Observational; multicenter; retrospective; prospective clinical registry	117
Gory et al. [11]	Observational; multicenter; retrospective; prospective clinical registry	100

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Conflict of interest

None declared.

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