Reply

Resposta

Lindolfo Carlos Heringer¹, Ricardo Vieira Botelho¹, Matheus Fernandes de Oliveira¹, Ulysses de Oliveira Sousa¹

Dear Editor.

We read with great interest the comments of Drs. Teles and Kraemer¹ on our article "The number of burr holes and use of a drain do not interfere with surgical results of chronic subdural hematomas (CSDH)". We really appreciated their attention to our study and contribution to current statements on CSDH treatment.

We agree that standard management of this condition still remains controversial in its pre-operative, intraoperative and postoperative details^{1,2,3,4,5,6,7,8}. This may be due to complex pathophysiological characteristics of this disorder and distinct patient profiles in different health institutions. We also recognize the great value and contribution of the randomized controlled trial (RCT) performed in 2009 by Santarius et al.⁴, in which the use of a drain was effectively associated with a lower rate of recurrence of CSDH and lower rate of patient mortality⁴. The same author has a commendable list of publications in this regard, reinforcing the advantages of using a drain⁵.

However, it is almost a decade since the publication of the RCT by Santarius et al., which was the sole RCT discussing this theme at the time, and more recently, some newer, respectable publications have brought to our attention the fact that the same results might not be achieved worldwide. In this regard, Gernsback et al.⁷ and Sivaraju et al.⁸ have recently reported, in two different respectable neurosurgical journals, that their results did not match with those found by Santarius et al.⁴ In both cases, the use of a drain did not affect recurrence rates^{7,8}. We must highlight that neither of these recent studies were RCTs^{7,8}. Our article had some common points with the Gernsback and Sivaraju studies⁶.

Additionally, we understand and agree that our study clearly had some drawbacks, including the retrospective design, absence of randomization and limited sample size. All these points may impair the quality of our results and their conclusions. However, as far as we know, our paper is the best available evidence nationally, and is a realistic study reflecting our routine management of this disease.

One should remember that even a randomized trial evaluating only one sample produces internal validity for that sample and several other studied samples or centers would be needed to create external and generalized validity and evidence. Therefore, rather than arguing against the results of a RCT, we would like to propose that it is necessary to comprehend CSDH as a complex disease, with potentially different outcomes depending on the sample's clinical profiles, technical aspects and regional nuances.

References

- Teles AR, Kraemer JK. Management of chronic subdural hematoma in Brazil. Arq Neuropsiquiatr. 2018;76(8):570-1. https://doi.org/10.1590/0004-282X20180082
- Teles AR, Kraemer JK. Management of chronic subdural hematoma: a Brazilian national survey and systematic literature review. J Neurosurg. 2012;117:A424.
- Teles AR, Falavigna A, Kraemer JK. Surgical treatment of chronic subdural hematoma: systematic review and meta-analysis of the literature. Arq Bras Neurocirur. 2016;35(2):118-27. https://doi.org/10.1055/s-0035-1571270
- Santarius T, Kirkpatrick PJ, Ganesan D, Chia HL, Jalloh I, Smielewski P et al. Use of drains versus no drains after burrhole evacuation of chronic subdural haematoma: a randomised controlled trial. Lancet. 2009 Sep;374(9695):1067-73. https://doi.org/10.1016/S0140-6736(09)61115-6

- Guilfoyle MR, Hutchinson PJ, Santarius T. Improved long-term survival with subdural drains following evacuation of chronic subdural haematoma. Acta Neurochir (Wien). 2017 May;159(5):903-5. https://doi.org/10.1007/s00701-017-3095-2
- Heringer LC, Sousa UO, Oliveira MF, Nunes AS, Alves KA, Zancanaro ML et al. The number of burr holes and use of a drain do not interfere with surgical results of chronic subdural hematomas. Arq Neuropsiquiatr. 2017 Nov;75(11):809-12. https://doi.org/10.1590/0004-282x20170136
- Gernsback J, Kolcun JP, Jagid J. To drain or two drains: recurrences in chronic subdural hematomas. World Neurosurg. 2016 Nov;95:447-50. https://doi.org/10.1016/j.wneu.2016.08.069
- Sivaraju L, Moorthy RK, Jeyaseelan V, Rajshekhar V. Routine placement of subdural drain after burr hole evacuation of chronic and subacute subdural hematoma: a contrarian evidence based approach. Neurosurg Rev. 2018 Jan;41(1):165-71. https://doi.org/10.1007/s10143-017-0831-2

¹Instituto de Assistência Médica ao Servidor Público Estadual, Programa de Pós Graduação, São Paulo SP, Brasil.

Correspondence: Matheus Fernandes de Oliveira; Rua Loefgreen, 700; 04040-000 São Paulo SP, Brasil; E-mail: mafernoliv@yahoo.com.br

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