AJNR

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M.I. Vargas, J. Boto and Z. Kulcsar

AJNR Am J Neuroradiol 2017, 38 (4) E29
doi: https://doi.org/10.3174/ajnr.A5087
http://www.ajnr.org/content/38/4/E29

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We read the recently published paper by Mathur et al[1] regarding the most appropriate technique to follow-up patients treated for spinal malformations, particularly dural fistula, and they propose to do this by MRA.

In our hospital, we follow-up these pathologies by MRA, and conventional angiography is performed only when there is a radioclinical discrepancy.

We understand the paper has limitations due to being a retrospective study; however, we have the following remarks:

- We believe the use of high field significantly improves the quality of MRA, particularly because of the size of the vessels.[2,3]
- The use of contrast medium with vascular remnant[4] or a doubly concentrated contrast medium for dynamic sequences also improves the identification of lesions and allows better analysis of these lesions.
- Performing MIP and MPR reconstructions improves the accuracy of diagnosis.

Finally, we think that it is important to standardize the follow-up of these pathologies, as far as the type and quantity of contrast medium and type of field used. Although these pathologies are not frequent, most of them are curable, and they can cause considerable deficits with tremendous impact on the daily life of patients if not treated.

http://dx.doi.org/10.3174/ajnr.A5087

Disclosures: Zsolt Kulcsar—*UNRELATED*: *Consultancy*: Stryker Neurovascular, Balt.

REFERENCES

1. Mathur S, Symons SP, Huynh TJ, et al. **First-pass contrast-enhanced MR angiography in evaluation of treated spinal arteriovenous fistulas: is catheter angiography necessary?** *AJNR Am J Neuroradiol* 2017;1:200–05 CrossRef Medline
2. Vargas MI, Barnaure I, Gariani J, et al. **Vascular imaging techniques of the spinal cord.** *Semin Ultrasound CT MR* 2016 July 12. [Epub ahead of print] CrossRef
3. Vargas MI, Gariani J, Sztajzel R, et al. **Spinal cord ischemia: practical imaging tips, pearls, and pitfalls.** *AJNR Am J Neuroradiol* 2015;36:825–30 CrossRef Medline
4. Vargas MI, Nguyen D, Viallon M, et al. **Dynamic MR angiography (MRA) of spinal vascular diseases at 3T.** *Eur Radiol* 2010;20:2491–95 CrossRef Medline

M.I. Vargas
J. Boto
Z. Kulcsar
Division of Neuroradiology
DISIM, Geneva University Hospital
Geneva, Switzerland