Luca Padua · Vanessa Conti · Costanza Pazzaglia
Pietro Caliandro

About neurophysiological evaluation in suprascapular nerve entrapment and methods of review

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Recently we read an article published by Harald Zehetgruber, H. Noske, T. Lang, and Christian Wuring entitled "Suprascapular nerve entrapment. A meta-analysis" [Int Orthop (2002) 26:339–343]. Suprascapular nerve entrapment is an uncommon but important entrapment neuropathy. We would like to take the opportunity to comment that article.

The purpose of the article was "to perform a review of the literature between 1959 and 2001." Furthermore, an aim of the study was to "reveal factors enabling discrimination between the two most frequent causes – ganglion and suprascapular notch [1].

The authors reviewed the literature and found 88 surgically confirmed cases and cited 47 references. As literature analysis, the authors used the Index Medicus database and Medline; how the articles were searched and by what terms was not specified.

The authors did not mention an article of ours [2] where we reported six cases of a suprascapular nerve lesion. We examined electrophysiologically six patients with clinically suspected suprascapular nerve entrapment to locate the site of the lesion. The location of the entrapment site in suprascapular neuropathy is essential in treatment planning. Three of our patients presented entrapment at the suprascapular notch and three at the

spinoglenoid notch. Neurophysiological examination of the suprascapular nerve allows the site of entrapment to be distinguished in cases with mild axonal nerve damage as well. Please note that our paper was focused on the clinical and neurophysiological differences between suprascapular notch and spinoglenoid notch nerve compression; furthermore our article is more recent than the neurophysiological articles cited in the references.

According to the evidence-based medicine community [3], we believe that a literature review must be exhaustively performed through sensitive tools that now are easily available, and these tools must be used correctly. This is essential, particularly where the purpose is to perform a thorough literature analysis (although the aim of the meta-analysis was "to summarize the data of surgically confirmed cases").

In conclusion, we believe that neurophysiological evaluation is essential to provide fundamental information for the surgeon. In fact, it can indicate where the entrapment occurs – at the suprascapular notch or the spinoglenoid notch.

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L. Padua · V. Conti · C. Pazzaglia · P. Caliandro (✉)
Department of Neurosciences,
University Cattolica,
Fondazione Don C. Gnocchi, Largo F. Vito 1, 00168 Rome, Italy
e-mail: p.caliandro@rm.unicatt.it
Tel.: +39-06-30154435, Fax: +39-06-35501909