

The real evidence for polymyalgia rheumatic as a paraneoplastic syndrome

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Dear Editor,
We read with interest the systematic review recently published by Muller et al. (1), in which the authors discuss the current evidence concerning the incremental risk of underlying neoplastic diseases in patients with polymyalgia rheumatica (PMR). In their review, the authors analysed the results obtained in several cohort studies, including one by our group (2), where we reported an OR=5.1 (CI 95% 2.9-8.9), significantly higher than in other papers. Based on these large differences, Muller et al. conclude that there is little evidence of PMR as a *true* paraneoplastic disease but suggest caution when a diagnosis of PMR is made, since symptoms of cancer are difficult to differentiate from *true* PMR. Although their suggestion is worthy of endorsement, the reasoning behind it has some inescapable weaknesses. Firstly, the definition of what is a paraneoplastic condition remains controversial. Secondly, in the papers they considered for their review the diagnosis of PMR was based on different sets of criteria, outlining the difficulty of defining *true* PMR. Importantly, the follow-up period for linking PMR to cancer was different from one study to another, reflecting arbitrary limits rather than objective considerations, and so clearly impacting on the strength of the association. In our paper, PMR was considered as potentially cancer-associated when a patient was diagnosed with cancer within two years before and after PMR diagnosis. Other authors made different choices; for example, in a paper published in 2014, Muller et al. excluded from their large, observa-

tional cohort all those PMR patients who had already received a diagnosis of cancer (3). They still found a significant association with the risk of cancer, but obviously lower than in our cohort. This does not necessarily mean that all the cancer-associated PMR cases observed in our study were actually paraneoplastic; however, it does testify that patients who receive a diagnosis of PMR are at higher risk for receiving or having recently received a diagnosis of cancer. Moreover, our study, although limited by a relatively small sample size, took advantage of a clinical follow-up of 2 years, while the majority of studies dealing with the same issue are registry-based. This might have contributed to the differences in the observed results.

Taking together all these considerations, it is our opinion that the prevalence of paraneoplastic PMR is generally underestimated. A properly tailored prospective cohort study is required to clarify better whether patients with PMR are at higher risk of cancer and, therefore, to decide which screening strategies, if any, are appropriate.

REFERENCES

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