## Criteria for Polymyalgia Rheumatica. Tale Without End



Some stories just run and run! The ideal recipe is that the subject should be controversial and, if at all possible, incapable of solution or resolution. The disease described should be one that is common, preferably one on which most are able to voice an opinion. Canny editors fan the flames. Such stories are controversial, frequently quoted, and therefore improve citation indices. If they involve criteria that can later be used in clinical trials, impact factor will soar even higher. Shrewd investigators procure invitations to speak at meetings forever more. Welcome to the 30th anniversary party for diagnostic criteria for polymyalgia rheumatica!

That polymyalgia rheumatica (PMR) is a great mimic has never been in doubt. In retrospect, a variety of clinical syndromes described just over 100 years ago may well have been the earliest descriptions of this condition (although there is evidence from old masters that cranial arteritis antedated this by at least 500 years, convincingly depicted by artists of both the Dutch and Florentine schools). It is possible that Bruce's description of senile rheumatic gout in 1888<sup>1</sup> as well as periarticular fibrositis (1936)<sup>2</sup>, myalgic syndrome of the elderly (1951)<sup>3</sup>, and anarthritic rheumatoid disease (1956)<sup>4</sup> were all what we would now consider to be PMR. This term was first used by Barber, an English rheumatologist working from the spa hospital at Buxton in 1957<sup>5</sup>. Sadly, and ironically, he died prematurely soon after from inflammatory disease of connective tissue.

This was at a time when British rheumatology was dominated by 3 spa hospitals (at Bath, Buxton, and Harrogate), each with around 200 beds for the inpatient treatment of rheumatic diseases. This situation lent itself to the recognition and delineation of some of the less common rheumatic diseases. In the second half of the last century, rheumatology became established in each and every district hospital, when these spa centers remained as hubs with a spoke network. Around 1974 two rheumatologists with a longstanding interest in polymyalgia (Allan Dixon and Alistair Mowat, whose seminal article on the disease was one of the

most cited papers to be published by *The Journal* in its infancy<sup>6</sup>) sought to unite hospitals in the southwest of England through a multicenter study. This was the genesis of the first diagnostic criteria set for PMR, coordinated by Philip Wood from the Arthritis Research Campaign (ARC) Epidemiology Research Unit in Manchester, with the author of this editorial, then a trainee, as the humble data collector. These criteria first appeared in abstract form at the International Congress of Rheumatology in San Francisco in 1977 and were published in 1979<sup>7</sup>.

Other criteria sets soon followed, notably from Hazleman in Cambridge,  $UK^8$ , and from Hunder's group at the Mayo Clinic, Rochester,  $USA^9$ . One criteria set emanates from Japan<sup>10</sup>.

With such diversity of choice, attempts have been made to recommend a "best buy" 11, athough this approach may be slightly simplistic. It is far from certain that disease manifestations are identical in all parts of the world. Criteria sets ostensibly for polymyalgia alone may be confounded by the presence of giant cell arteritis in some individuals. In some countries, notably the United Kingdom, polymyalgia has become a disease of primary care, the populations in hospital that form the subject of such comparisons often presenting more selective material. In spite of this, there has been a consensus that the Bird/Wood criteria of 1979 and the Chuang/Hunder criteria of 1982 perform as well as any.

This issue of *The Journal* contains the first-ever application of a Delphi methodology to this state of affairs <sup>12</sup>, from Dasgupta and colleagues, supported by both the American College of Rheumatology (ACR) and the Mayo Foundation. As a first stage, a panel of experts was convened from those attending the International Conference on PMR and Giant Cell Arteritis at Cambridge in July 2005. Ratings were established for the various criteria considered, and a second stage involved convening a further panel of experts at the ACR annual meeting in November 2005. A third stage roamed widely, with a mail survey of rheuma-

See Developing classification criteria for PMR: comparison of views from an expert panel and wider survey, page 270

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tologists and nonrheumatologists derived from a variety of sources across Europe and North America. This author was prevented from participating extensively because of other commitments, but generously was given acknowledgment in the article. The authors concede putative weakness in their methodology. How expert does an expert have to be before called to the conference table? If a laboratory criterion receives approval by consensus, might this simply reflect its availability to the participants? Might not selection of typical nonrheumatologists be less precise than selection of rheumatologists? Might not the final cohort be heavily biased towards those who can afford a conference fee? The precise separation of "diagnostic" criteria from "classification" criteria, which this report claims to derive, may raise some eyebrows. Perhaps most crucially, might not the expert panel have been influenced unduly by the criteria sets they have been brought up with over the previous 30 years?

In spite of these concerns, the surprise (or lack of surprise) is perhaps that 7 core criteria formulated by these methods bear a remarkable similarity to those previously published. This author, on reading the abstract for the first time, felt quite at home, as I suspect would clinicians at the Mayo, several of whom were also represented on the panels.

Perhaps the study is therefore best regarded as a vindication of the Delphi technique, criticized by some when set against conventional methods for derivation of criteria, which approach revolves around calculation of sensitivity and specificity against control groups, together with due attention to each of these so only criteria conferring high sensitivity as well as high specificity are incorporated in the final selection. The second splendid achievement is perhaps to have brought together interested clinicians from both sides of the Atlantic in the hope of pooling expertise and resources for future endeavors in the field of translational science.

Prospects in PMR research remain exciting. Fundamental studies combining immunology with imaging are providing new insights, hopefully to resolve the old controversy of whether the primary clinical problem in polymyalgia is a vasculitis or a synovitis or both. This, in turn, may lead to a rethinking of conventional time-honored steroid therapy, which even now has not been fully evaluated in terms of optimum dosing and therapeutic/toxicity ratio, although some of these trials are now being performed in Europe and elsewhere. A variety of drugs exist as "steroid-sparing"

agents, with varying degrees of success, not yet fully evaluated as primary treatment, especially the biologics. Associations between PMR and thyroid disease, neoplasia, and even rheumatoid arthritis of the elderly still require clarification.

As polymyalgia criteria approach their 30th anniversary with the convening of roundtable parties of experts, it is to be hoped that the conviviality engendered might lead to enduring collaboration between clinicians on both sides of the Atlantic. In turn, perhaps an editorial writer attending the 50th or 60th birthday party might find something new to say.

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