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IS IT CORRECT TO ATTRIBUTE THE FIRST DESCRIPTION OF POLYMYALGIA RHEUMATICA TO DR. WILLIAM BRUCE?

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ABSTRACT – *Objective:* The first description of Polymyalgia Rheumatica (PMR) is traditionally attributed to Dr. William Bruce. We wondered whether it is correct this attribution.

Materials and Methods: We read his original article published in 1888 where he reported on five male patients aged from 60 to 74 years whom he had visited at the Strathpeffer spa in Scotland.

Results: All five patients much improved or were completely cured after taking sulphur waters internally, frequent spa baths and thorough massages. To the best of our knowledge, thermal therapies have not been shown to be effective in patients with PMR. In 4 out of 5 Bruce's patients, exposure to cold temperatures triggered the onset or the worsening of musculoskeletal manifestations. However, there is no constant relation between exposure to cold and onset of PMR in the published literature. Finally, the patient of case III also suffered from manifestations that are completely uncharacteristic for PMR.

Conclusions: On reading Bruce's original article, it is doubtful whether all five cases would correspond to patients that we identify as PMR in everyday clinical practice.

KEYWORDS: Polymyalgia rheumatica, Senile rheumatic gout, History of medicine, Polymyalgia-like syndromes.

Polymyalgia rheumatica (PMR) is considered the most common inflammatory rheumatic disease in the elderly, with an onset peak in the 71-80 years age group[1]. The first description of PMR is traditionally attributed to Dr. William Bruce. In 1888, he reported on five male patients aged from 60 to 74 years whom he had visited at the Strathpeffer spa in Scotland. This Victorian health spa had 4 sulphurous water fountains and rooms for peat baths. Bruce suggested that these patients might be suffering from a new disease different from gout and rheumatoid arthritis and called this new condition senile rheumatic gout[2]. The main characteristics of this new condition were as follows: the patients' age characteristics (all patients were over > 60 years old, and gout was considered virtually unknown in elderly male patients); the absence of a family history of rheumatic diseases; and its complete curability after several months.

On reading his article, however, it is doubtful whether all five cases reported by Bruce[2] would correspond to patients that we identify as PMR in everyday clinical practice.

Indeed, all five patients much improved or were completely cured after taking sulphur waters internally, frequent spa baths and thorough massages. To the best of our knowledge, thermal therapies have not been shown to be effective in patients with PMR.

In 4 out of 5 Bruce's patients, exposure to cold temperatures triggered the onset or the worsening of musculoskeletal manifestations. As highlighted by a recent systematic review and meta-analysis, there is no seasonal onset for PMR[3] and there is no constant relation between exposure to cold and onset of PMR.

Finally, the patients of case III had involvement of the shoulder and/or pelvic girdles, to the point that he was unable to turn in bed, feed or dress himself. However, this patient also suffered from great pain of the stomach and subsequent constipation, had a succession of nervous attacks resembling fainting fits, and his urine was of a dark colour and often contained a sediment like red sand. Could a PMR diagnosis come to mind for this patient?[4]

About 50 years had to pass before in 1945 Holst and Johansen[5] reported what in our opinion should be considered the best description of patients with PMR up to that time. That year, they reported on five female patients who suffered from sudden aching and pain in the shoulders, arms, and hip regions. Shoulder motion was limited; raised erythrocyte sedimentation rate (ESR) was present in all patients; low-grade fever was present for weeks or months in three patients. After a year or more, their symptoms improved. No other disease appeared during follow-ups. It is noteworthy that the authors stated that pain arose from the extra-articular soft tissues, and, therefore, they gave this disease the name of peri-extra articular rheumatism[5].

The question of whether the history of PMR should start more recently than is commonly thought is not a purely academic speculation. To date, no specific laboratory tests are available, and diagnosis of PMR is essentially clinical. Some diseases must be distinguished from PMR, and there are PMR-like syndromes[6,7]. Therefore, a rigorous methodologic approach is necessary to avoid cramming a raft of similar conditions in one all-inclusive cauldron. From this point of view, Bruce's article[2] can be seen as misleading in that it does not help with the nosographic categorization of PMR.

In conclusion, is it still correct to attribute the first description of PMR to Dr. William Bruce? Inappropriate attributions abound in medical literature. We hope that our brief report will encourage others to express their views and open a constructive discussion around this issue.

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