

Fever at diagnosis as a confounding factor in patients with polymyalgia rheumatica. Messages from primary care. Comments on Bettrains *et al.*

Sirs,

We read with interest the Letter to the Editors recently accepted for publication in *Clinical and Experimental Rheumatology*, where Bettrains *et al.* reported an age- and sex-matched monocentric case-control study regarding, among other, diagnostic implications of fever at diagnosis in patients with polymyalgia rheumatica (PMR) (1).

According to their study, the presence of fever at diagnosis was confounding factor for an infectious problem to the point that a high percentage (45%) of these patients received a course of antibiotics prior to rheumatologist referral.

70% of them had other systemic manifestations (such as anorexia and weight loss) associated to fever, whereas these manifestations were present only in 3% of patients without fever at diagnosis.

Fever is not a diagnostic or classification criterion for PMR (2, 3). The general practitioner (GP) is usually the first physician who examines patients with suspected PMR (4, 5).

In 2018, we reported our monocentric cohort-study on favouring and confounding factors for the diagnosis of PMR in primary health care (6). Among 303 age- and sex-matched patients consecutively referred to our out-of-hospital public rheumatologic outpatient clinic, fever (frequently associated with other systemic manifestations) were present at onset in 22% of 41 patients where we confirmed diagnosis of PMR made by the GP, and in 18.4% of 93 patients where the first diagnosis of PMR was not confirmed. Finally, among the 169 patients with unrecognised PMR by the GPs, no one received antibiotics for fever prior to their referral to our outpatient clinic (data not reported). Indeed, in an e-mail questionnaire we sent to GPs after the first visit

Table I. Confounding factors influencing diagnostic delay in our cohort study, listed by frequency.

1. No PMR knowledge
2. Normal inflammatory markers
3. RF positivity
4. Osteoarthritis
5. Behavioural disorders
6. Microcrystal diseases
7. Fever and other systemic manifestations

PMR: polymyalgia rheumatica; RF: rheumatoid factor.

it emerged that the GPs had always considered fever as a neoplastic warning. Finally, fever was only in the seventh place (Table I) among the confounding factors that favoured a diagnostic delay (median days = 24.3 ± 12.5 vs. 42.9 ± 15.5).

The relationship between malignancies and PMR are still debated, and constitutional manifestations may be present in both cases (7-9). Bettrains *et al.* did not report number and percentage of patients with suspicion of malignancy prior to diagnosis of PMR. Was this diagnostic possibility absent in their database?

Fever may be a confounding factor for the diagnosis of PMR, so favouring a diagnostic delay. No doubt. Other academic investigators reported high percentage (30%) of patients who received a course of antibiotics prior to diagnosis of PMR (10). Therefore, a referral bias could explain what happens in the so-called third level (university hospitals) and in primary care.

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