Response to 'What rheumatologist should know about Fabry disease' by Moiseev *et al*

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In their correspondence[1] to our study on the prevalence of Fabry disease (FD) within a national cohort of early undifferentiated arthritis patients in Germany,[2] Moiseev *et al* raise additional issues of importance for clinical rheumatologists pertaining to the change of symptoms in FD over time.

Retrospective studies analysing the medical history of patients with confirmed FD raised concerns that FD may be overlooked in rheumatological practice. In particular, Lidove *et al* reported that 9 of 40 patients were mistakenly diagnosed with a rheumatic condition in adulthood prior to the diagnosis of FD.[3] This is well in line with the data reported by Moiseev *et al* in their correspondence. They observed erroneous rheumatological diagnoses in 28 of 107 confirmed FD cases across all age groups. Of importance, a significant delay of FD diagnosis from first symptoms is often reported.[3–5] For instance, Lidove *et al* report a mean age at diagnosis of 37.2 years with a range up to 71 years in their study focusing on musculoskeletal complaints of FD patients.[3] Moreover, a cross-sectional study from the Fabry Outcome Survey comparing older (>50 years) to younger patients with confirmed FD showed that the mean age at first diagnosis was >50 years in the older FD patients, representing 34% of the 1934 patients included.[6] Additionally, patients diagnosed at an older age or with a presumably late clinical onset may differ phenotypically from patients diagnosed at a younger age.[6] Although acroparesthesias or Fabry crises tend to be a more prominent feature at a younger age and to diminish over time,[5 7] joint complaints remain a significant burden for patients with 40%–50% of patients>50 years of age reporting joint pain or swelling in a survey by Ivleva *et al*.[7] In summary, FD patients often display musculoskeletal complaints and the correct diagnosis is typically delayed by years. In our opinion, these data provided a strong rationale for our study in which we intended to explore the prevalence of FD patients in a national cohort of early undifferentiated arthritis in adult patients (n=798, aged 56.5±14.3 years, range 18–87). We did not find a mutation considered pathogenic under the inclusion criterion of at least one swollen joint. Hence, our study reassures us that we do not systematically miss the diagnoses of FD in our adult early arthritis patients employing current standard of practice procedures. However, rheumatologists and even paediatricians may not generally be familiar with signs and symptoms of FD.[8] We are therefore delighted that our study raised the interest of Moiseev *et al* who comprehensively summarised clinical features of FD and shared data on the musculoskeletal complaints of their FD cohort in their comment.

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