Could the absence of risk factors delay the diagnosis of MS?. Mexican cohort

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Background: The risk factors(RF)that influence having MS are well known and homogeneous but there is little research on its influence within the time of diagnosis. We believe that the presence of these factors would increase the clinical suspicion and thereby, this would reduce the time of diagnosis.

Objective: To investigate if the absence of RF is related with the delayed diagnosis of MS. **Methods:** Observational study (2020-2021), with retrospective data analysis, performed in an attending tertiary institution. Patients were selected from the database of MS patients. Results: 75 patients were included, 37 were women (49%), 23 (31%) with smoking. The median age was of 29 years IQR(16-68), time of diagnosis was three months IQR(0-156), EDSS at diagnosis 2.5 IQR(1-9). The outbreak debut was motor 20%, sensitive 19%, cerebellar 5%, brain stem 12%, medullary 13% ,optic neuritis(ON)15%, multifocal 16%. There was no found correlation among diagnosis time and initial EDDS(S r=0.203,p =0.08). There was no difference in the diagnosis time regarding gender (p=0.11), smoking (P=0.95), presence or not of cardiovascular comorbidity (p= 0.45), reumathoid (p=0.82), psychiatric (p=0.318). There was a low positive correlation among the age increase and diagnosis time increase from the first ourbreak. (S r=0.32, p=0.005). Debuting with ON was associated with a lower diagnosis time compared with the debut in other places. (p=0.05). Conclusion: The absence of RF, with the exception of age, in MS doesn't have a crucial impact in the time of the diagnosis according to the observations in this cohort. This finding has been reported in other populations, could be ascribed to normalization with advancing age of some unspecific common symptoms with MS like joint pain and fatigue. The debut with ON revealed to be associated with a lower diagnosis time, perhaps due to more characteristic correlation between this symptom and MS.