(P11) LABORATORY USE OF CMSC CONSENSUS STATEMENT STANDARDS FOR OLIGOCLONAL BAND ANALYSIS

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Background: Laboratory standards for cerebrospinal fluid (CSF) analysis of oligoclonal bands (OCBs) were published in a 2005 Consensus Statement by a Consortium of Multiple Sclerosis Centers (CMSC) study group. The extent to which clinical laboratories practice these standards has not been evaluated. Objectives: To determine the prevalence among clinical laboratories of the following two major Consensus Statement standards to improve the diagnosis of multiple sclerosis (MS): 1) the use of isoelectric focusing with immunodetection (IEF/ID) methods, and 2) the direct comparison of paired serum and CSF samples. Methods: Together with the College of American Pathologists (CAP), we conducted a cross-sectional survey in 2009 of laboratories that evaluate CSF specimens. The questionnaire included items about demographic characteristics as well as institutional practices. We asked laboratories that analyzed OCBs whether they used IEF/ID methods and whether they assessed paired serum and CSF samples for OCBs. Results: Of 228 identified clinical laboratories that analyzed CSF for OCBs, 225 reported whether they used IEF/ID methods or not. Sixty-two (27.6%) of these 225 laboratories classified themselves as community hospital laboratories, 55 (24.4%) as university laboratories, 44 (19.6%) as county/city hospital laboratories, 28 (12.4%) as commercial reference laboratories, 14 (6.2%) as Veterans Administration laboratories, and the remaining 22 (9.8%) as other types. Eighty-six (38.2%) of the 225 laboratories used IEF/ID methods, while 139 (61.8%) of laboratories required paired serum and CSF samples for testing. Only 61 (27.1%) of the 225 laboratories, however, followed two major CMSC Consensus Statement standards for the analysis of OCBs: 1) the use of IEF/ID methods, and 2) the direct comparison of paired serum and CSF samples. Conclusions: Because two of the principal laboratory standards of the Consensus Statement for the analysis of OCBs are not widely implemented, physicians who use CSF analysis to evaluate patients with suspected MS should be aware of the methodology used by their clinical laboratories.

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