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Is IgG4 immunostaining of duodenal ampullary biopsies alone useful to diagnose autoimmune pancreatitis?

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To the Editor:

The recent paper by Moon et al. was interesting and presented an important examination of IgG4 immunostaining of ampullary biopsies as a potential tool to diagnose autoimmune pancreatitis (AIP).[1] Until recently, only two studies had examined the usefulness of this technique, both of which concluded that IgG4 immunostaining of ampullary biopsies is useful to diagnose AIP.[2,3] Moon et al.[1] also conducted a prospective study. In their study, ampullary biopsies in 53% (10/19) of symptomatic AIP patients were positive for IgG4 immunostaining, while biopsies from all of the control patients were negative. We agree with these results, but it should be noted that

ampullary biopsies show only an increased number of IgG4+ plasma cells. Although there is no doubt that IgG4 immunostaining of ampullary biopsies can provide supportive diagnostic information, it is exceedingly challenging for pathologists to make a histological diagnosis of AIP based only on the number of IgG4+ plasma cells. For this reason, we recently conducted a clinicopathological study based on the hypothesis that bile duct biopsies exhibit histological features that are directly related to the pancreas. Our study [4] revealed that the diagnostic sensitivity of IgG4 immunostaining of both ampullary and bile duct biopsies was 52% (15/29) for symptomatic patients with AIP (n=26) or IgG4-related sclerosing cholangitis (n=3). Twenty-one patients (72%) had more than 10 IgG4+ plasma cells in at least either biopsy. Furthermore, the bile duct biopsies not only indicated the number of IgG4+ plasma cells but also showed other characteristic histological features, including striform fibrosis and conspicuous eosinophil infiltration.[4] Taken together, these studies indicate that endoscopists should consider bile duct biopsies and ampullary biopsies at the time of ERCP, especially when AIP is suspected but cannot be definitively diagnosed.

References

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