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Diagnostic endoscopic mucosal resection is useful for diagnosing rectal tonsil

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Rectal tonsil is a rare disease involving a reactive proliferation of lymphoid tissue in the rectum. It is a benign lymphoid hyperplasia of the rectum, difficult to differentiate from lymphomas, in particular mucosa-associated lymphoid tissue [1,2], by biopsy specimen.

A 52-year-old woman with hematochezia visited our hospital. Colonoscopy showed submucosal tumors of multiple and variable size in the lower rectum, with a worm-like shape. A biopsy specimen suggested malignant lymphoma. Her soluble interleukin-2 receptor level was within the normal range (Fig. 1A). Magnifying endoscopy with narrow-band imaging showed an absence of surface structure and the presence of regular-caliber branching microvessels. Endoscopic ultrasound revealed homogeneous, hypoechoic thickening of the *lamina propria* with a clear border from the submucosal layer (Fig. 1B). We performed re-biopsies from lesions, which showed lymphocytes slightly infiltrated into the ducts, but lymphoepithelial lesions were not observed and a definitive diagnosis of lymphoma could not be reached. Accordingly, we performed an endoscopic mucosal resection (EMR) to get an *en bloc* specimen for definitive diagnosis. This specimen revealed that the tumors were composed of a great proliferation of lymph follicles whose germinal center was in the *lamina propria* (Fig. 2A). A large lymph follicle squeezed the normal ducts, but no findings of malignant lymphoma with destruction of normal duct structure or lymphoepithelial lesions were seen (Fig. 2B). Flow cytometry from the specimen by EMR showed polyclonal B cell proliferation, while a genetic test also showed no abnormality. Finally, we diagnosed her condition as rectal tonsil.

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Conflict of Interest: None

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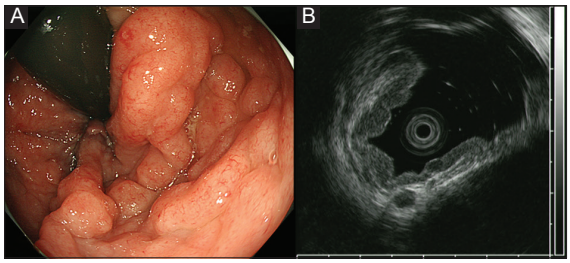

Figure 1 (A) Colonoscopy showed submucosal tumors of multiple and variable size in the lower rectum, with a worm-like shape. (B) Endoscopic ultrasound revealed homogeneous, hypoechoic thickening of the *lamina propria* with a clear border from the submucosal layer

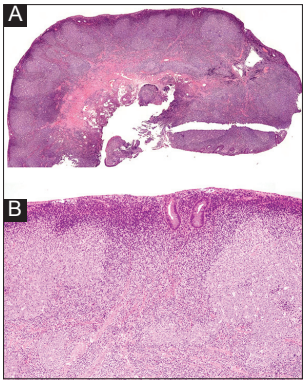

Figure 2 (A) The macroscopic specimen obtained by endoscopic mucosal resection revealed that the tumors were composed of a great proliferation of lymph follicles whose germinal center was in the *lamina propria*. (B) A large lymph follicle squeezed the normal ducts, but no findings of malignant lymphoma with destruction of normal duct structure or lymphoepithelial lesions were seen

References

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