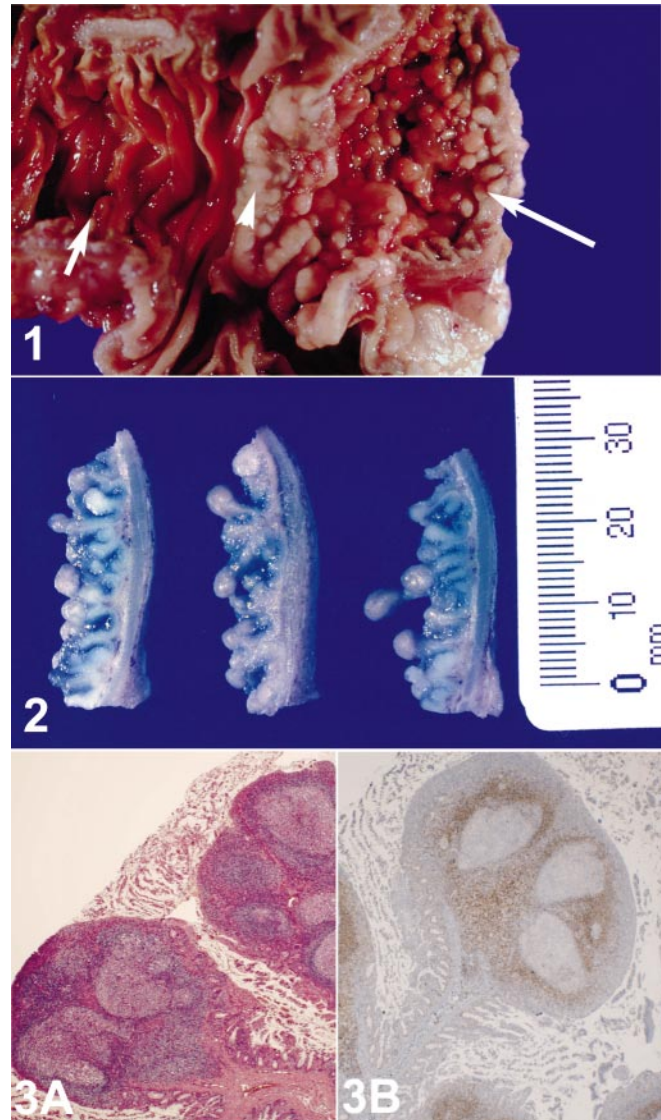


Polypoid Nodular Lymphoid Hyperplasia of the Terminal Ileum

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A 66-year-old, asymptomatic woman with a past history of tonsillectomy and appendectomy in childhood underwent a screening colonoscopy. Numerous small polyps were identified in the terminal ileum and the ileal side of the ileocecal valve. A single small polyp was also identified in the transverse colon. Biopsy of the ileal polyps showed lymphoid hyperplasia, while the lesion in the transverse colon was found to be a hyperplastic polyp. The ileal polyps could not be retrieved by colonoscopic means. The terminal ileum and 12 cm of the right colon were resected laparoscopically. Numerous (approximately 50) tan, sessile polyps (Figure 1), ranging from 0.2 to 0.7 cm in greatest dimension, were found closely clustered together in the terminal ileum and the ileal side of the ileocecal valve (Figure 1; long arrow points to terminal ileum, short arrow indicates colon, and arrowhead is at ileocecal valve). No polyps were present on the colonic side of the ileocecal valve or in the colon. On serial sectioning, the polyps were seen to be limited to the mucosa (Figure 2).

Sections from the ileum showed the polyps to be composed of multiple closely aggregated lymphoid follicles in the lamina propria of the ileal mucosa. The follicles contained prominent germinal centers surrounded by a mantle of small lymphocytes (Figure 3, A). The follicles were mostly discrete, although a few irregular and merging follicles were also seen. All germinal centers contained tingible body macrophages. Diffuse areas and cytologically atypical cells were not present. Immunohistochemical stains showed the follicles to be composed predominantly of B cells, with CD3-positive, CD45RO-positive T cells in the interfollicular areas. Germinal center B cells were negative for Bcl-2 (Figure 3, B) in multiple blocks. Antibodies to κ and λ light chains stained occasional plasma cells only. A search for parasites revealed no organisms. A diagnosis of polypoid nodular lymphoid hyperplasia was made. Serum immunoglobulin (IgA, IgG, and IgM) levels were found to be within normal limits.



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Lymphoid hyperplasia of the intestines is a benign reactive process also known as pseudolymphoma, lymphonodular hyperplasia, or terminal lymphoid ileitis.¹ It occurs in all age groups, but is best described in children.^{1,2} There are no definitions or valid criteria for when normal lymphoid tissue becomes hyperplastic, or for when hy-

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perplasia becomes pathologic.³ The dividing line between physiologic nodules and hyperplasia is thus ill-defined. Lymphoid hyperplasia may be discovered incidentally, at colonoscopy, or in patients undergoing colectomy, especially in the last few centimeters of the terminal ileum. However, cases that are symptomatic due to intussusception or prolapse are well documented.^{1,2} Lymphoid hyperplasia occurs mainly in the rectum and in the ileocecal region.¹ Eighty percent of lymphoid polyps are sessile and solitary; the remainder are pedunculated and/or multiple (numbering 2 to 6).²

Several causes of lymphoid hyperplasia have been postulated. *Giardia lamblia* is often present. In a small minority, immunodeficiencies underlie the hyperplastic state.² Some patients have low or absent IgA and IgM levels, decreased IgG levels, susceptibility to infection, and diarrhea with or without steatorrhea. There is also an association with familial adenomatous polyposis and Gardner syndrome. In children, lymphoid hyperplasia is often associated with viral infection.

The pathology of lymphoid hyperplasia is quite characteristic, consisting of prominent lymphoid follicles with

active germinal centers located in the mucosa and submucosa. The most important differential diagnosis is with lymphomatous polyposis. The presence of highly reactive germinal centers, numerous cell types, prominent vascularity, and polyclonality as determined immunohistochemically are the most important features in the differential diagnosis with lymphoma. Lymphoid hyperplasia may be differentiated from follicular lymphoma presenting as lymphomatous polyposis by Bcl-2 immunostaining of follicular germinal centers.³

The clinical significance of lymphoid hyperplasia lies in the possibility of these nodules serving as a nidus for prolapse and intussusception and in the association with immunosuppressive states. Local excision is curative; occasionally, spontaneous remission has been noted.²

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