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Nodular Lymphoid Hyperplasia of Small Intestine: A Case Report

Dr. Bijayalaxmi Sahoo, Dr. Hemalatha Ganapathy, Dr. B.O Parijatham
Department of Pathology, Sree Balaji Medical College And Hospital, Chennai, Tamil Nadu, India

***Corresponding author**
Dr. Bijayalaxmi Sahoo
Email: bijayalaxmi_sahoo@outlook.com

Abstract: Nodular lymphoid hyperplasia (NLH) of the gastrointestinal tract is characterized by the presence of multiple small nodules, between 2 and 10 mm in diameter. Although it may be detected in the stomach, large intestine or rectum, it is more often distributed in the small intestine. The pathogenesis is largely unknown. The present article shows a case report of Nodular Lymphoid Hyperplasia of small Intestine.
Keywords: Nodular Lymphoid Hyperplasia, Small Intestine.

INTRODUCTION

Nodular lymphoid hyperplasia of the gastrointestinal tract is a rare disorder and is characterized by the presence of multiple small nodules, normally between 2 and 10 mm in diameter, distributed along the small intestine (more often), stomach, large intestine, or rectum. It can occur in all age groups and can affect people with or without immunodeficiency [1]. Histologically, NLH is defined by markedly hyperplastic, mitotically active germinal centers, and well defined lymphocyte mantles found in the lamina propria and/or in the superficial submucosa. There are two forms of focal lymphoid hyperplasia are seen in the distal small intestine:

- The first, seen in very young patients, is rare and presents as a tumour-like appearance in the terminal ileum.
- The second, focal hyperplasia in the terminal ileum, also rare, occurs most commonly in older individuals.

The present article shows a case report of Nodular Lymphoid Hyperplasia of small Intestine in a 25 year old female patient presenting with complaints of Vomiting.

CASE REPORT

A 25 year female patient came to the Department of General Surgery, presenting with complaints of vomiting, End to End ileocolic anastomosis was done.The specimen with mesentric lymph nodes was sent for histopathological examination.

Grossly**,** small intestine with caecum, appendix in to measuring 60cm, appendix measuring 5cm. The small intestine appeared to be dilated with a stricture present 5cm from the ileocaecal junction. Cut section at the region of stricture shows multiple ulcerations with small nodules all over the mucosa. In Histopathological Examination the proximal resected margin showed small intestinal mucosa with ulceration, focal erosion with congestion, edema, dense inflammatory cell collections in the lamina propria. The Distal resected margin showed hypertrophied lymphoid follicles in the lamina propria and submucosa. The Ulcerated area showed ulceration and congestion of mucosa with submucosal edema and fragmented muscle layer. The Stricture showed hyperplastic small intestinal mucosa with increased inflammatory infiltrates in the lamina propria. The polypoidal lesion showed hypertrophied lymphoid follicles with germinal centers in the mucosa.

Appendix showed features of subacute appendicitis with hypertrophied lymphoid follicles. Sections from 15 lymph node studied showed reactive lymphoid hyperplasia with germinal centers dilated and congested sinusoids with focal histiocytic proliferation. There was no evidence of granuloma in any of the sections studied. The final diagnosis was given as Nodular Lymphoid Hyperplasia of Small Intestine with focal ulceration.

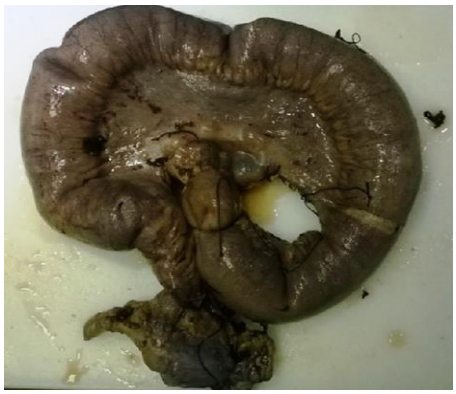

Fig-1: Gross: small intestine with caecum and appendix

Fig-2: Cut section: multiple ulcerations with small nodules

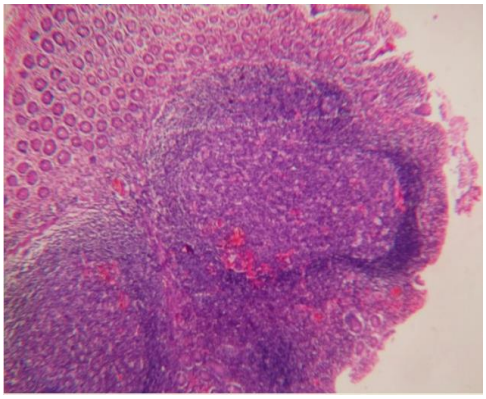

Fig-3: Section showing Hypertrophied lymphoid follicles(Low power view)

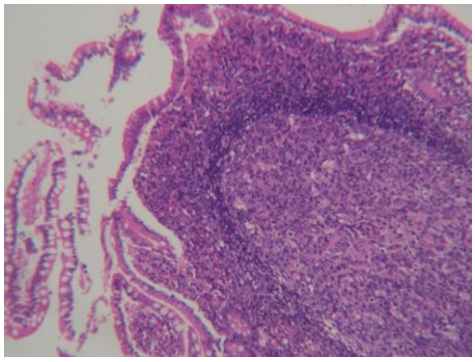

Fig-4: Section showing Small intestinal mucosa with hypertrophied lymphoid follicle showing the germinal centre. (Low power View)

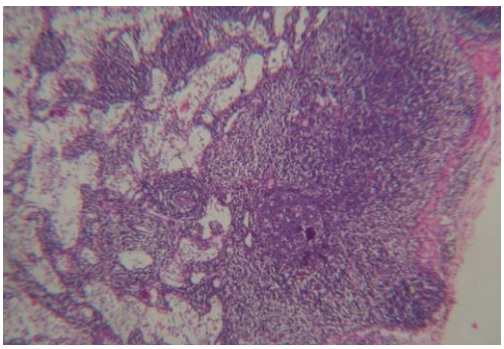

Fig-5: Section showing Cystic dilatation

DISCUSSION

Nodular lymphoid hyperplasia is a lymphoproliferative disease that cause still remains unknown. The occurrence of nodular lymphoid hyperplasia is rare. It has been reported that about 20% of patients with common variable immunodeficiency syndrome [2-9]. In some cases it was found to be associated with intestinal lymphoma. NLH was also reported in adult patient without any kind of immunodeficiency [10-15]. Few cases were found to have Giardia Lamblia infection [15]. There is a theory of the local immune response to the antigens as a stimulators in GI tract, but still no antigen is defined. Nodular lymphoid hyperplasia always needs a differential diagnosis from the other polyposis conditions, especially malignant lymphoma and familial adenomatous polyposis. The most often localisation of hyperplastic lymphoid nodules usually described as innumerable polypoid lesions, is the small bowel, especially the terminal ileum, but they can occur in the stomach and in the colon as well. Rarely, the polypoid lesions themselves can cause bleeding or intestinal obstruction.

CONCLUSION

In conclusion, Nodular Lymphoid Hyperplasia is a rare but problematic disease with respect to diagnosis and treatment. However, it must be distinguished from a variety of polyposis syndromes to avoid misdiagnosis and unnecessary radical treatments.

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