

Parasitic Infection Clinically Mimicking Malignancy

Sarupa Susan Kurien^a, Peter Chellappa^b, Apuca Susan Mathew^a, N Sundaresan^a

a. Department of Pathology, Dr.SMCSI Medical College Karakonam, Trivandrum;

b. Department of Surgery, Dr.SMCSI Medical College Karakonam, Trivandrum*

ABSTRACT

Published on 27th September 2013

The nematode *Strongyloides Stercoralis* has worldwide distribution and infection mainly occurs in adults who suffer from chronic illnesses, mental illnesses or in an immunocompromised host. The worm penetrates the skin enters the venous system, travels to the lungs and migrates up the respiratory tract and down the oesophagus to finally reach the small intestine. The female lives in the small intestine and lays eggs there. The cycle is perpetuated. Because of this capability of autoinfection, the worm resides in the host and produce illness for upto thirty years. Here we present a case in a 65 year old male patient who presented with obstructive gastric symptoms.

Keywords: *Strongyloides stercoralis*

*See End Note for complete author details

CLINICAL HISTORY

This 65 year old male patient presented with c/o abdominal pain of 4 months duration. Before two weeks he had dyspeptic symptoms with recent vomiting which turned out to be bilious at times. Occasional complaints of constipation was also noted. This patient had history of Chronic Obstructive Pulmonary Disease. He was a known case of Type 11 diabetes Mellitus with mononeuritis and multiplex cranialis.

On examination the abdomen was soft, liver palpable, no free fluid, hard stool felt during per rectal examination. Clinical impression was that of Inflammatory bowel disease. In view of the dyspeptic symptoms an Oesophago Gastro Duodenoscopy was done.

The findings revealed normal oesophagus, fundus and pylorus. Stress ulcers were seen in antrum.

A proliferative growth visualized in second part of duodenum obliterating the lumen and a provisional diagnosis of periampullary carcinoma/visceral lymphoma was made and biopsy specimen was sent for histopathological study.

Few tiny mucosal fragments were received by the Histopathology Lab and the sections showed duodenal mucosa with an inflammatory infiltrate in lamina propria which consisted mainly of eosinophils few neutrophils were also seen. Mucosa was otherwise normal. But the mucosal crypts and glandular lumina showed sections of parasitic worms both adult worms

and larvae were seen. The adult worms were tiny with typical curved pointed tails morphology of the parasite suggested *Strongyloides stercoralis*.

The patient was put on antihelminthic treatment and after the course a repeat OGD Scopy showed complete resolution of mucosa.

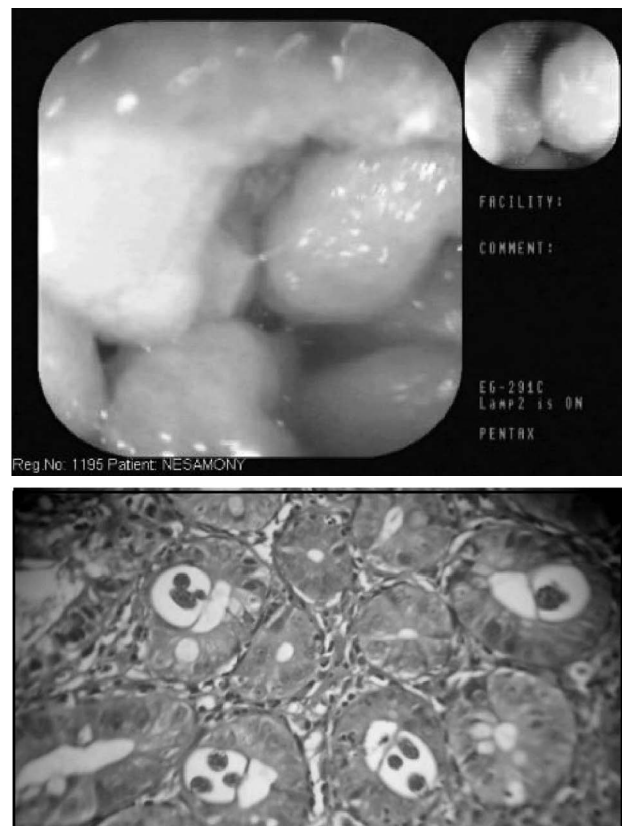


Figure 1 & 2. Showing endoscopy images

Corresponding Author:

Dr. Sarupa Susan Kurien, Assistant Professor, Department of Pathology, Dr. SMCSI Medical College Karakonam, Trivandrum.
Phone: 9447144959. Email: pathsmcsi@gmail.com

DISCUSSION

Strongyloidiasis is a helminthic infection, infecting mainly the bowel. It may cause fatal disease in immunocompromised patients, Hyper infection syndrome can occur in these patients.¹ The site of involvement include large bowel, small bowel and stomach. Many patients remain asymptomatic.

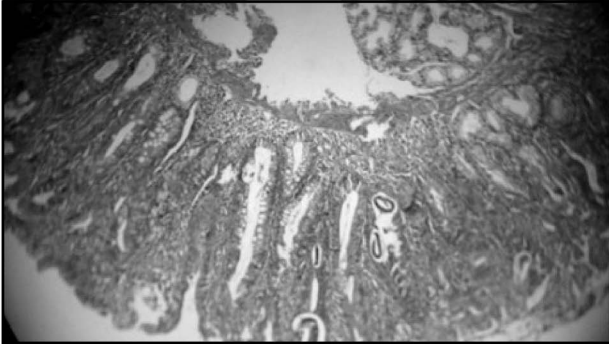


Figure 3. Intestinal mucosa



Figure 4. Tiny adult worms with typical curved pointed tails

Clinical features include diarrhoea, abdominal pain and tenderness, nausea, vomiting, weight loss, malabsorption and GI bleeding. Stool examination is the primary ancillary technique. The differential diagnosis include other helminthic infections. Histologic inflammatory pattern may mimic Crohns disease, Ulcerative colitis and Pseudomembraneous colitis.³ Sometimes the oedematous folded mucosa may mimic a new growth when visualized through OGD Scopy as in this case and biopsy proved it to be otherwise. Nonerythematous boggy appearance of duodenal mucosa is the key

in making correct diagnosis.¹ Stool examination initially was negative in this case. Concentration technique must be employed to demonstrate the parasite. Analysis of three consecutive samples of stool has been considered an effective means of diagnosing the disease.²

END NOTE

Author Information

1. Dr. Sarupa Susan Kurien, Assistant Professor, Department of Pathology, Dr.SMCSI Medical College, Karakonam, Trivandrum
2. Dr. Peter Chellappa, Associate Professor, Department of Surgery, Dr.SMCSI Medical College, Karakonam, Trivandrum
3. Dr. Apuca Susan Mathew, Professor and HOD, Pathology, Dr.SMCSI Medical College, Karakonam, Trivandrum
4. Dr. N Sundaresan, Professor of Pathology, Dr.SMCSI Medical College Karakonam, Trivandrum

Conflict of Interest: None declared

Cite this article as: Sarupa Susan Kurien, Peter Chellappa, Apuca Susan Mathew, N Sundaresan. Parasitic Infection Clinically Mimicking Malignancy. Kerala Medical Journal. 2013 Sep 27;6(3):74-75

REFERENCES

1. Kakati B, Dang S, Heif M, Caradine K, McKnight W, Aduli F. Strongyloides duodenitis: case report and review of literature. J Natl Med Assoc. 2011 Jan; 103(1):60-3.
2. Gastro intestinal manifestations in Strongyloidiasis-3 cases- Ni-yada, Sirikit et al Southeast Asian Journal of Tropical Medicine and Public Health, V.41.No1.Jan.2010
3. Al Samman M, Haque S, Long JD. Strongyloidiasis colitis: a case report and review of the literature. J Clin Gastroenterol. 1999 Jan; 28(1):77-80.
4. Weight SC, Barrie WW. Colonic Strongyloides stercoralis infection masquerading as ulcerative colitis. J R Coll Surg Edinb. 1997 Jun; 42(3):202-3.
5. Gutierrez Y, Bhatia P, Garbadawala ST, Dobson JR, Wallace TM, Carey TE. Strongyloides stercoralis eosinophilic granulomatous enterocolitis. Am J Surg Pathol. 1996 May; 20(5):603-12.