

CLINICAL PRACTICE AND SURGERY OF THE COLON, RECTUM AND ANUS

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3 Presentation of Symptoms

In most instances, public remains ignorant about the symptoms arising from the cancer of the intestine. It would be difficult for them to recognize the seriousness of the symptoms attributable to colonic cancer from other nonmalignant bowel diseases. And they are sometimes misguided by the neighbors, relatives, and local practitioners. Patients from the developing or underdeveloped countries seek medical advice at the terminal stage, when the malignant tumor turns out to be inoperable.

In many instances, the symptoms attributable to malignant tumor may not be straightforward, and may mask with other disease such as amebic colitis. In these cases, they are often treated blindly, in line with the amebic colitis. And chronic anemia is often overlooked, because of ignorance. This condition is more often believed to be associated with poor nutritional diet, peptic ulcer disease and amebiasis.

Furthermore, screening program would be regarded to be luxury and expensive to the developing countries. To set up such a clinic requires public education and awareness, but it is a debatable issue whether it would be cost-effective, where the provision of free comprehensive health services is bare minimum to the needs of ordinary indigenous people.

Despite all these practical problems, symptoms of colonic carcinoma, in particular to those tumors developed in the cecum or ascending colon remain silent for several months. Constipation is very rare due to the fact that the cecum has a spacious capacity. This delays the symptoms to develop late and when it develops, the tumor has caused obstruction to the ileocecal valve or it has invaded to the parietal wall. In these cases, symptoms could be of various forms. These are loose motion, tiredness and anemia. In some cases, patient is presented with a loose motion and in other cases, anemia is recognized in routine blood test. These are often overlooked.

In this case, the investigation must include both upper and lower gastrointestinal tract in order to exclude malignancy in the stomach, pancreas, enlarged spleen and colorectal cancer.

Patients, in most instances, cannot remember their previous pattern of bowel habits, and when the change in habit has started. They are often vague about the duration of the symptoms. In all instances, leading questions should be put forward to the patient, asking specific question. This may assist in retrieving the near accurate symptoms, instead of relying upon their own description of their versions.

STRIKING SYMPTOMS OF COLONIC CARCINOMA

- Initially weakness or not feeling well
- May look pale or suffering from jaundice (in advanced condition)
- Loss of appetite
- Loss of body weight
- Abdominal pain or pain in the back or lumbosacral region
- Constipation – Requiring laxative
- Change in bowel habit
- Burping, funny noise in the belly
- Fullness either in lower or upper abdomen
- Discharge of mucus mixed with blood per rectum.

All these symptoms are nonspecific, until a detailed account of each symptom has been documented with duration of onset and associated changes in the well-being of the patients.

In routine blood test, low hemoglobin (<10 gm) is not uncommon without any evidence of blood loss. But it is very common among the laborers in the developing countries and is more often associated with amebic colitis and hook-worm sufferers. Nevertheless, a full investigation must be carried out to exclude malignancy.

It has been frequently found that carcinoma of the cecum remains symptoms-free or presented with an acute appendicitis or loose motions. Let me highlight a sad experience with one lady patient, aged 70. She was admitted with an acute appendicitis and her daughter was a theater sister in the District Hospital in Wales.

Clinically, there was a tender localized palpable mass in the right iliac fossa (RIF), but emergency operation was

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deferred because of her low hemoglobin. She had no bowel symptom and no other symptoms related to cecal carcinoma known to her, despite the fact that she was fully aware of the colonic tumor. Her hemoglobin on admission was around 8 gm/dl. This is very rare among the European people.

Initially, she was treated with conservative line of approach because of misleading diagnosis. The tender palpable mass in the right iliac fossa was considered to be appendicular mass. She responded to the conservative treatment, despite the fact that it was cecal carcinoma. Since she recovered well with conservative treatment, she had barium enema done a few weeks later, but the finding was inconclusive. Surprisingly, her hemoglobin dropped again. This prompted for undertaking an elective laparotomy. This turned out to be advanced cecal carcinoma with metastasis in the mesenteric lymph glands. Of course, it was regrettable that prognosis would have been better, if emergency operation were carried out on admission.

LOSS OF APPETITE, LOSS OF BODY WEIGHT AND NOT FEELING WELL

Many patients do not recognize the significance of these nonspecific symptoms, until they are questioned. They are correlated with the duration of the tumor and metastasis. In most instances, they do not know their body weight. In these situations, the loss of body weight could be established by asking them whether the present clothes are loose to their body or have noticed some changes in their fittings over the last few weeks.

Since this question has been referred to them, they started wondering in order to recollect their old memory and to find out the difference between what used to be six months ago and what has been the present fittings. From these differences, they would reply with a definitive answer without referring to the actual body weight. The loss of body weight may be associated with diabetes and hyperthyroidism. And in malignant disease, it denotes that this loss of body weight could be attributable to a poor appetite and it could be due to secondaries in the liver. Hence, it reflects a bad prognosis.

SYMPTOMS OF ABDOMINAL PAIN

It is regarded to be a late presentation and it would suggest obstructive feature of the large bowel, resulting from a partial obstruction by the tumor, advance growth, invading the parietal peritoneum, psoas muscle or other structures such as sacral plexus, posterior vagina, prostate gland, bladder or anal canal. In most cases, other symptoms such as poor appetite, loss of body weight and change in bowel habits would appear concurrently.

A change in bowel habit may be of various types. It could be either progressive constipation or a change in consistency of the feces. The usual presentation is constipation that requires laxative which may not be effective with regular usual dose. In some cases, patient may demand a larger dose. Constipation means less frequency of bowel action, and it also implies to hard feces. Period of constipation that is followed by loose motion at irregular pattern is the important clinical bowel symptom related to tumor in the distal colon or in the rectum. Persistent increasing constipation that requires laxatives is also regarded to be serious clinical feature of distal colonic tumor that requires an immediate investigation.

Other type is a change in bowel habit. It is one of the important classical symptoms associated with the colonic carcinoma, but it is frequently associated with the tumor in the distal colon and the rectum. It refers to abnormal habit, pattern or frequency of going to the toilet that would be quite different from his or her regular habit in everyday or week.

In other words, it denotes something different from his or her usual habit and it may refer to a frequency of bowel movement everyday, or every week over a month. Furthermore, this change in bowel habit is also measured by frequency per day or per week, and consistency of the feces. Any evidence of discharge of mucus mixed with or without blood is very important. Soft feces, loose motion, motion mixed with slime, associated with or without blood are also pathognomonic.

All these bowel symptoms may be missed, if the clinicians rely upon the patient's own description of symptoms. This may lead to a wrong diagnosis or the latter may be delayed and when the correct diagnosis has been made, it would be too late for the patient to be treated with a good prognosis. A curable disease would turn out to be incurable state of affairs at the end.

In this respect, the patient should be reassured and explained the merits of such questions prior to put specific question to the patient on those points.

These questions are:

a. When did you notice that you tend to open bowel less frequently and how long this problem has been going on?
b. Do you take laxative, for bowel action?
c. Have you noticed that the motion has become softer than usual over many weeks?
d. Have you noticed a lot of mucus or slime in the motion or when the bottom is wiped out with tissue paper or with water, as the case may be?
e. Have you noticed any blood mixed with motion or with slime?

In this way, it is better to extract the correct answer from the patients than relying upon the description of symptoms which may not be relevant to the lesion in the colon.

When a particular type of question is referred to the patients, they would try to recollect the symptoms which could be a

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difference between the old forgotten habit and the present symptoms.

BURPING AND FUNNY NOISE IN THE ABDOMEN

Burping denotes belching which is more often referred to as dyspepsia after a meal is taken. Physician tries to reassure the patient by referring to indigestion, duodenal ulcer, biliary dyspepsia due to gallstones, but in fact it may be associated with a serious and hidden pathological condition that may interfere with propagative peristalsis at the distal gut. It results from reverse peristalsis, initiated by the partial obstruction in the ileocecal region or thereafter.

It has been a unique experience, in dealing with a man of 70 referred to the clinic, because of complaining of dyspepsia. But surprisingly, simple history and rectal digital examination revealed the true pathology located in the other end of the abdomen. The diagnosis was carcinoma of the rectum and later gastroscopy did not show evidence of peptic ulcer disease.[1]

Therefore, burping may be an innocent symptom, but the primary pathology could be located anywhere between the cecum and the rectum. Advanced carcinoma, or annular growth may interfere with the passage of feces and flatus. This triggers exaggerated bowel sounds, due to increased or turbulent peristalsis, thus causing loud sound or excessive borborygmi. This may put the patient in an embarrassing position in the public place. Passage of flatus may relieve the symptoms and may reduce the fullness of the abdomen.

Apart from burping, patient may notice that the lower abdomen tends to be full or distended and may complain that their fitting around the waist seems to be tight. One has to bear in mind that many men and women tend to develop a pot belly in lower abdomen after the age of 40.

In sharp contrast, the upper abdomen tends to be full or blown up more than that in the lower abdomen, in those instances in which the colonic obstruction is in the sigmoid colon. In these cases, the transverse colon tends to be dilated and patient may have developed other bowel symptoms, as described before. These distinct clinical findings could be apparent on both inspections of the abdominal wall and by palpation.

DISCHARGE OF SLIME, MUCUS AND BLOOD PER RECTUM

In the developed countries, patient becomes alerted by the apparent painless discharge of fresh blood noticed in the commode, or in the toilet tissue paper. More often, it is associated with internal piles and constipation. This condition could also be attributed to an acute fissure-in-ano, if the fresh bleeding is associated with acute sharp pain in the anal orifice. Nevertheless, it should not be ignored unless proved otherwise.

But motion mixed with blood is regarded to be a serious clinical pathology. It could be due to a polyp, adenoma, rectal or colonic carcinoma, ulcerative colitis, proctitis, Crohn's colitis or amebic colitis. Many a times, patient recognizes the abnormal consistency in the feces and discharge of mucus or slime. The latter is usually associated with the growth in the rectum or anal canal. It is very unlikely to be attributed to the growth in the cecum or right colon. Discharge of slime or mucus is also associated with a foul odor. In amebic colitis or proctitis, feces are usually soft, mixed with yellowish jelly-like mucus, mixed with streaks of blood.

Despite all these symptoms being accurately recorded, exact location of the tumor could not be tentatively diagnosed without clinical examination and investigations. Nevertheless, statistically there are distinct differences in the symptoms that could refer to the possible site of the tumor, but these statistics are not reliable in clinical practice. In this section, all these differences have been compiled for the purpose of better clinical understanding and to avoid any pitfalls in clinical diagnosis.

SYMPTOMS ASSOCIATED WITH THE GROWTH IN THE RIGHT SIDE OF THE COLON

1. Patients remain symptoms-free for the early stage, but anemia may be early indication for cecal carcinoma, if pernicious anemia, piles or peptic ulcer disease could be excluded. Nevertheless, concomitant carcinoma in the colon must be excluded by all investigation.
2. Fullness in lower abdomen, with or without palpable lump in the right side of the abdomen would suggest cecal carcinoma, and Crohn's ileitis. Renal carcinoma or right hydronephrosis, volvulus of the cecum or sigmoid colon remains an alternative diagnosis. In female patient, ovarian cyst or ovarian tumor or fibroid of the uterus may be found concomitantly on clinical examination. In some cases, cecal carcinoma is diagnosed during emergency appendicectomy.
3. Discharge of slime per rectum or diarrhea is rare in this case.

SYMPTOMS ASSOCIATED WITH THE GROWTH IN THE LEFT SIDE OF THE COLON

1. Constipation could be a predominant presentation. In this situation, ignorant patients start treating themselves, without seeking any medical advice. They may take laxatives, add high roughage diet. If the constipation is a striking feature, patients tend to seek early medical advice. Or they could be admitted with an acute large bowel

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obstruction. In this acute admission, the tumor is usually annular type of growth in the descending or sigmoid colon. Because of this early presentation, prognosis seems to be brighter. Around 25 percent of cases are admitted with acute large bowel obstruction.

2. A change in bowel habit, such as persisting constipation followed by diarrhea is also more prominent in clinical presentation among these cases. Mucus or slime in the soft motion are more often recognized by the patient, while wiping the bottom with a toilet tissue or with water that depends upon the hygiene habits of a particular country.
3. Fullness of upper abdomen, exaggerated bowel sounds or borborygmi could be an embarrassing situation in the public place. In chronic obstruction, the cecum takes the brunt of back pressure first, before the transverse colon is distended. It behaves like blowing up a balloon, where the distal end is first seen to be expanded.

SYMPTOMS ASSOCIATED WITH THE GROWTH IN THE DISTAL PART OF THE SIGMOID COLON, THE RECTUM OR ANAL CANAL

Clinical presentation for the growth developed in the sigmoid colon, rectum or anal canal depends upon the exact location and macroscopical features of the tumor. All symptoms may not correlate to the anatomical site of the tumor, but they may provide a broad clue for possible sites of the growth.

1. Annular type of the tumor is frequently located in the lower sigmoid colon and less frequently in the rectum. The symptoms develop much earlier and they are of colicky type of discomfort, associated with increasing period of constipation. In this situation, patient starts seeking medical advice and taking laxative, without realizing the true cause for progressive tendency for not going to the toilet.
2. In all other cases, the early symptom, if any, is the painless bleeding per rectum. More often, it is treated like piles or a fissure-in-ano. But on closer questioning, it would reveal that bleeding occurs at the end of the defecation or it comes mixed with feces. In some cases, patient notices blood in the underpant, although he did not go to the toilet. Pain is usually absent in the cancer of the rectum, but pain or discomfort seems to be a part of other symptoms, then it has to be considered that the tumor has invaded to the parietal wall, sacral plexus, prostate gland or vagina.
3. Constipation is the next striking feature. It tends to be increasing despite taking laxative. It may be associated with alternate episodes of diarrhea, followed by a period of constipation. This is often due to a change in bowel habit or alteration of bowel habit. In some patients, episodes of diarrhea become more frequent than constipation.

   Many a times, patient develops urge defecation that forces him to get up early morning. This is not the usual habit of getting up out of bed and collection of mucus or slime and blood derived from the rectal tumor gives rise to urge defecation, but in the toilet, patient experiences discharging mucus and blood along with a little soft pipe stem type feces. This is referred to as a spurious diarrhea, bloody slime. These symptoms are frequently present in those cases in which the tumor is in the lower rectum.
4. Patient also experiences incomplete emptying of the bowel, after being to the toilet. This is another classical presentation in the cancer of the lower rectum.

   Patient tends to strain in order to empty the rectum. This feature is known as tenesmus and patient uses toilet several times in the morning and throughout the day, because of an urge defecation and feeling of incomplete emptiness of the rectum at each attempt.

   Various terminologies for these sorts of bowel actions have been referred to in the literature. They are morning diarrhea, bloody diarrhea, mucus diarrhea or spurious diarrhea. Early morning diarrhea and incomplete emptying of the rectum are frequently associated with the cauliflower type of tumor in the ampulla of the rectum.
5. Apart from the bowel symptoms, patient may experience pain in the lumbosacral region, believing of sciatica pain. In fact, the tumor has advanced and found fixed to the parietal wall, invading the sacral plexus. In other cases, patient may complain of pain around the anus, like fissure-in-ano, but in fact the tumor has invaded the lower anal canal, covered by the skin.

Bleeding per vagina may be associated with the invasion of the rectal cancer into the posterior fornix, thus forming a rectovaginal fistula. In male patient, passing of bubbles and feces per urethra may be reported because of rectovesical fistula.

MALIGNANT GROWTH IN THE ANAL CANAL

In most instances, the lesion in the anus is squamous cell carcinoma. It may occur in the chronic anal fissure. In this case, patient complains of pain in the anus. Rectal digital examination may reveal the hidden bomb as squamous cell carcinoma. Confusion may also arise for other carcinoma. Although, it may seem to be squamous cell carcinoma, but histology report may turn out to be adenocarcinoma in the anal canal. It is concluded that the tumor originally developed in the mucosa of the upper part of the anal canal but it has protruded further down to be palpable in the anal orifice. Other rare variety is the basal cell carcinoma, which develops at the area near to dentate line. Commonly it occurs at the anal verge and is a low grade tumor.

REFERENCE

1. Saha SK. Carcinoma of the rectum diagnosed as diverticulitis and later presented with dyspepsia. 1991 (personal experience).

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Sisir Kumar Saha Bsc MBBS FRCS is a Consultant General Surgeon in the United Kingdom. He completed 2 years of training in Surgery from the SSKM Hospital and then took to General Surgery and Urology in England. He has published many original research works in the leading journals and designed a new surgical instrument known as Saha Bladder Neck Spreader. He has also designed new operative techniques on the Perineal Dissection of AP Resection (APR), Primary Closure of the Perineal Wound after APR, Laparoscopic Cystic Duct Ligation, Prostatectomy, Undescended Testis and Inguinal Hernia. In addition, he published the etiology of hypocalcemia in acute pancreatitis, pathogenesis of peptic ulcer diseases and also published a new treatment for the relief of postoperative pain, based upon the pain threshold level. He also published his work on how the wound infection could be reduced to near to zero percent, based upon a new concept, using peritoneal lavage with metronidazole.

In 2009, Saha delivered a prestigious lecture at IMACON-2009, held in Hyderabad and in 2010 at the annual meeting of Association of Surgeons of India, West Bengal Chapter (SASICME) on the memorial oration of Prof Amiya Kumar Sen. The subject of this lecture was the merit between low anterior resection and abdominoperineal resection (APR) of rectum for carcinoma.

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