

EVALUATION OF ANAL DISEASE COMPLEX IN SURGICAL OPD IN TAGORE MEDICAL COLLEGE AND HOSPITALA. Sasivannan¹, B. V. Sreedevi²**HOW TO CITE THIS ARTICLE:**

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ABSTRACT: Anal disease complex consists of anal symptoms of the patient and the findings by the surgeon. Every individual in his lifetime would have had anal discomfort ranging from pain to bleeding per anus but statistics of anal disease complex in less available. The drawback regarding anal disease is, patient presents with more than one symptom and more than one finding co- exist and the patient gets treated for his complaints from family physician up to super specialist. **AIM OF THE STUDY:** To find out the commonest presentation and the commonest findings by the surgeon. **MATERIAL AND METHOD:** In this retrospective study we analyzed 200 of our patients presented to surgical OPD with anal symptoms. **RESULT:** From our study we found out the commonest symptom presentation was Painful defecation with bleeding per anus and the commonest finding was Fissure in ano.

KEYWORDS: Fissure in Ano, Fistula in Ano, Perianal Abscess, Haemorrhoidectomy, Banding.

INTRODUCTION: Anal disease complex comprises of both the symptoms presented by the patients and findings by the surgeon. Usually symptoms are, anal discomfort, painful defecation with bleeding per anus, painful swelling around anal margin, painful swelling near anus with fever, painless bleeding from anus, mass descending per anus, difficulty in defecation, blood streaked stools, discharge from anus.

The findings usually vary from fissure in Ano, fistula in Ano, hemorrhoids, perianal abscess, perianal hematoma, sentinel tag of skin, anal carcinoma, anal warts, anal polyps, rectal carcinoma, and prolapse rectum.

MATERIALS AND METHODS: In this retrospective study we analyzed 200 patients who presented to the surgical OPD with symptoms related to anus and we examined them and noted the findings. Period of study was taken from September 2013 to January 2014. The data regarding, age, duration of symptoms, nature of symptoms, sex were taken into account.

Similarly the findings by the surgeon were taken and patient was subjected to inspection, per rectal examination, proctoscope examination. If the diagnosis cannot be arrived, the patient was subjected to sigmoidoscope, colonoscope USG Abdomen, CT Abdomen and biopsy of the lesion.

Overlapping of the symptoms was present and hence the symptom which was very severe and prolonged was taken in to account. And similarly the findings for which the patient needed surgery was taken into account and recorded.

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RESULTS:

Symptom	No. of Patients	SEX		Duration of Symptoms	Age	Percentage
		Male	Female			
Anal Pain/ Discomfort	10	8	2	5-6 days	25-30	5%
Painful Defecation with bleeding per anum	58	23	35	3-4 days	30-35	29%
Painful Swelling around anal margin	8	5	3	3-4 days	30-40	4%
Painful swelling near anus with fever	10	9	1	2-10 days	40-45	5%
Painless bleeding per anus	12	6	6	5-6 days	20-30	6%
Mass descending per anus	42	27	15	30-50 days	35-45	21%
Difficulty in defecation	28	22	6	10-15 days	25-40	14%
Blood streaked stools only	20	12	8	10-12 days	30-50	10%
Discharge from Anus	12	8	4	15-20 days	30-60	6%

Anal Symptom Analysis Chart

Results of Symptoms analysis of our study show that commonest symptoms for which the patient attended surgical OPD is Painful defecation with bleeding per anum. The number of patients were 58 (29%) and the least common symptom for which the patient attended surgical OPD was painful swelling around the anal margin. The number of patients was 8 (4%). The duration of symptoms varied lasting from 2 days to 50 days.

Patients who had fever or severe pain presented earlier to the hospital. Patients who had only mass descending per anus with no other constitutional symptoms presented late to the hospital. Regarding age criteria, anal symptoms usually presented in late 2nd decade and 3rd decade. This is due to the fact that patient in that age group are subjected to work stress and bad food habits.

Regarding sex criteria M: F ratio is 120:80 that is 60:40 which shows male patients are more affected due to travelling and bad food habits. In females it is interesting to note that working ladies who have given birth to children are more affected due to unhealthy food habits and continuous desk work. Pregnancy also plays a role by hormonal effect and also by pressure effect. Female patients who are home- makers have less anal complaints as they eat home –made food and absence of desk work.

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Anal Disease	No. of patients	Duration of Symptom	Sex		Age	% age
			Male	Female		
Fissure in Ano	72	10-12 days	42	30	30-40	36%
Fistula in Ano	12	20-25 days	9	3	35-58	6%
Hemorrhoids	58	40-50 days	35	23	28-48	29%
Peri Anal Hematoma	8	3-7 days	5	3	20-30	4%
Peri Anal Abscess	10	2-7 days	8	2	30-38	5%
Sentinel Tag	17	28-35 days	3	14	25-40	8.5%
Others	9	10-40 days	5	0	40-50	4.5%
Nil Findings	14	10-20 days	5	13	30-60	7%

Anal Disease Analysis Chart

Analysis of anal disease shows the commonest anal disease is Fissure in Ano and least common anal disease is perianal hematoma. Regarding the duration of symptoms for perianal abscess, the duration was least as the patient had fever and severe pain. When the patient had only Hemorrhoids he landed late to the hospital as he had no worrying symptoms which will affect his day to day life.

Regarding the age, usually the patient presented in the late second decade and early 3rd decade.

Regarding the Sex Ratio M: F ratio is 112: 88 that is 56%: 44%.

From analysis of these two data charts it is certain that patients, when they have severe bleeding, severe pain or fever associated with anal problem they had reported to the hospital to take treatment. Because of economic background, as they do not want to lose their livelihood, they continue with their symptoms if they can, with conservative Management

DISCUSSION: Hemorrhoids: the word hemorrhoids is derived from Greek word Haima (bleed) + Rhoos (flowering) means bleeding. The pile is derived from the Latin word 'pila' means Ball.

It is downward sliding of anal cushions abnormally due to straining or other causes. Anal cushions are aggregation of blood vessels (arterioles, venules) smooth muscles and elastic connective tissue in the submucosa that normally resides in left lateral, right posterolateral, and right anterolateral anal canal.

True haemorrhoidal¹ cushions are found in the left lateral, right anterior and right posterior position. Hemorrhoids are thought to function as part of the continence mechanisms and aid in complete closure of the anal canal at rest. Because hemorrhoids are a normal part of anorectal anatomy, treatment is only indicated if they become symptomatic. Patients usually complains of painless bleeding, mucous discharge, prolapsed pile mass, painful prolapsed mass.

The types of hemorrhoids are.

1. Internal that is above the dentate line and covered with mucous membrane.
2. External is below the dentate line covered with skin.
3. Interno -external -where both occurs.

They are two classifications of hemorrhoids. They are:

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- I. Primary haemorrhoids which are located in 3, 7, 11, 0' clock positions which are related to the branches of the superior haemorrhoidal vessel which divides on the right side into two and left side it continues as one. Secondary haemorrhoids occur between the primary ones.
- II. It is also classified as First degree haemorrhoids where they are found within the anal canal and may bleed but does not come out. Second degree haemorrhoids where pile masses prolapsed during defecation but returns back spontaneously. Third degree haemorrhoids where pile prolapsed during defecation, can be replaced back only by manual help. Fourth degree haemorrhoids where piles that are permanently prolapsed. Causes of haemorrhoids are hereditary, morphological where the pressure by the blood column is transmitted as superior rectal vein has no valves; other causes are straining, diarrhea, constipation, hard stool, low fiber diet, over purgation, carcinoma rectum, pregnancy and portal hypertension.

In certain cases cause cannot be pinpointed and hence it is termed idiopathic. The prevalence rate of piles is 4.4% in the world.² It can occur at any age and common in 30-60 years and the incidence is equal in both the sexes. The commonest symptoms are bleeding per anus, mass per anus, discharge, pruritus and pain due to infection. On inspection prolapsed pile mass is visualized. Per rectal examination and proctoscopy examination is done to detect the position of haemorrhoids and find out whether it is primary or secondary haemorrhoids. Sigmoidoscopy or colonoscopy or barium enema should be done if there is any suspicion of associated malignancy.

Pathogenesis of hemorrhoids: It is well known that they have a hereditary predisposition probably due to inherent weakness of venous wall. The current concept of genesis of primary haemorrhoids is that the mucosa and sub mucosa at these three sites, 3, 7, 11 0' clock are occupied by longitudinal anal cushions which are present from infancy. Increased pressure within these cushions seems to cause downward displacement, with the development of haemorrhoids at the corresponding locations. As these cushions prolapsed out the internal sphincter grips them and further increase the venous engorgement leading to haemorrhoids.

TREATMENT:

Medical Treatment:

1. Sitz bath
2. High fibre bath
3. Liquid laxatives
4. Analgesics

Non - Surgical Treatment

1. Sclerotherapy
2. Banding
3. Cryo therapy
4. Infrared coagulation
5. Laser Therapy
6. Doppler guided haemorrhoidal artery ligation

Surgical Treatment

1. Open Haemorrhoidectomy
2. Closed Haemorrhoidectomy
3. Stapled Haemorrhoidectomy

Complications due to hemorrhoids are bleeding which leads to anemia, strangulation, thrombosis, ulceration and gangrene.

Haemorrhoidectomy is performed using an open or a closed technique.³ The open technique is most commonly used in U.K and is known as Milligon – Morgan operation named after surgeon who described it. The closed technique is popular in U.S. Both involve ligation and excision of Hemorrhoids but in open technique the anal mucosa and skin are left open to heal by secondary intention and in closed technique the wound is sutured.

FISSURE IN ANO: This is a linear fissured ulcer in the anoderm which may be acute or chronic. Any fissure existing for more than 6 weeks is termed chronic. Pathogenesis of fissure in Ano: In the anal canal both the anterior and posterior zones are the least vascularized portions, because the distribution of the two primary divisions of superior hemorrhoidal is at 3 O' clock and 9 O' clock position and hence water shed zones occur at 6'0 clock and 12 O' clock position. Angiographic studies have also confirmed the ischemic nature of most of the chronic fissure.

High anal tone due to spasm of internal anal sphincter seems to be a contributory factor and this tight internal sphincter leads to compression of the arteries and hence severe pain is associated with fissure and also this explains why a division of internal anal sphincter or a stretch allows fissure healing. Clinical features: In acute fissure, patient complains of painful defecation, constipation and passing blood streaked motion due to direct contact between the fecal bolus and the fissure. In chronic fissure apart from these symptoms, features of chronic constipation, abdominal distension and left iliac fossa fullness due to unevacuated sigmoid colon may also be present.

Position of the fissure is mostly posterior in 95%⁴ of cases and in the rest it can be anteriorly placed.

Classic Triad of anal fissure is a) Sentinel skin tag b) Anal Ulcer c) Hypertrophic anal papilla. Up to 85% of acute fissure and nearly 50% of chronic fissure can be successfully managed non-operatively.⁵

Anterior fissures account for about 10% of those encountered in women but only 1% in men. On examination or anal inspection, a canoe –shaped ulcer is seen in 6 O' clock or 12 O' clock position with a skin tag which is called the sentinel pile. Digital examination may be extremely painful and often resisted and it should be done gently with enough lubrication.

Besides assessing the extent of sphincteric spasm and indurations along the ulcer, it excludes lesions higher up in the rectum. Protoscopic examination is very painful and it should be done under anesthesia.

TREATMENT OF ANAL FISSURE:

1. Lord's dilatation is done under GA to relax the sphincter. It is the manual dilatation of Lord in 1969 of the anus. Under general anesthesia with relaxation using four fingers of each hand to

cause vigorous stretching of the anal canal to break the circular constricting band in the wall of the ano rectum.

2. Stretching of the anal sphincter (Recamier 1829) using two fingers of each hand under anesthesia is also an alternate procedure. It is better than Lord's dilatation as complications are less.
3. If the fissure is chronic, then Dorsal fissurectomy with sphincterotomy is done under anesthesia.
4. Lateral anal sphincterotomy can be done either by closed method or open method where internal sphincter is divided partially away from the fissure either in right or left lateral positions.

Preventive measures for anal fissure:

1. Adequate fluid intake (6 -8 glasses of liquids)
2. Fiber rich diet (Vegetables, Fruits, Brown Rice)
3. Bulk forming agents (Husk, Bran)
4. Stools softener (Lactulose)
5. Local anesthetic agents (Lignocaine 5%)
6. Sitz Bath
7. Avoiding Constipation.

PERIANAL ABSCESS: This usually results due to suppuration of anal gland or suppuration of thrombosed external pile or any infected perianal condition. It lies in the region of the subcutaneous portion of external sphincter. Clinical features of perianal abscess are severe pain in peri anal region with difficulty to sit and on examination a smooth, tender, soft; swelling can be seen in the peri anal region. The treatment of perianal abscess includes antibiotics, analgesics, laxatives, sitz bath and abscess should be drained under general anesthesia.

Overall Ano rectal sepsis is more common in men than women although infection with skin type organisms is evenly distributed. The only condition with which ano rectal abscess is likely to be confused are abscesses connected with pilonidal sinus, bartholin gland. Anorectal abscess has a recurrence rate of up to 48%.⁵ Ano rectal abscess is a common surgical emergency and present as an acute abscess or as a chronic anal fistula. There is a male preponderance with a male to female ratio of 2.4 to 1.

FISTULA IN ANO: It is defined as a track lined by granulation tissue which connects perianal skin superficially to anal canal, ano rectum or rectum deeply. It usually occurs in a pre- existing ano rectal abscess which burst spontaneously. Fistula in ano usually arises as an infection of the intersphincteric glands which leads to the formation of abscess due to blockage of the draining duct by infected debris. This abscess may resolve by spontaneous drainage into the anal canal or may progress to an acute anorectal abscess.

Treatment of this abscess is incision and drainage but source of infection in the intersphincteric space persists leading to the development of the fistula in ano. While most fistulas start as a simple single primary track, recurrent infection eventually causes formation of secondary tracts. There is male preponderance with annual incidence of 1 in 10, 000.⁵

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CLINICAL FEATURES: Usually the patients with fistulas present with discharge per anum which can vary from mucous discharge to pus, or to bloody discharge and include intermittent purulent discharge with intermittent pain.

CLASSIFICATION:

Standard (Milligan Morgan 1934 Geoilgher 1975)	Park's (1976)
1. Subcutaneous	1.Intersphincteric
2. Low anal	2.Transsphincteric
3. Sub mucous	3.Supra elevator
4. High anal	4. Extra sphincteric
5. Peri rectal	

Fistulas are divided into low level fistulas and high level fistulas according to the internal opening which is below or above the Ano- rectal ring.

INVESTIGATIONS: Low level fistulas are usually diagnosed by inspection per rectal examination and protoscopic examination. If high level fistulas are suspected then in addition, MRI fistulogram and endorectal ultrasound colonoscopy, CT Abdomen is done to rule out other causes of high level fistulas.

Treatment of fistulas depends on whether they are low-level or high level. Low-level fistulas usually need either fistulotomy with curetting or fistulectomy. High level fistulas require staged procedure such as initial colostomy followed by definitive procedure followed by closure of colostomy. Fistulectomy involves coring out of the fistula usually, by diathermy cautery. Fistulotomy³ means fistulous track must be laid open from its termination to its source. It involves division of all these structures lying between the external and internal openings. It is applied mainly to intersphincteric and trans sphincteric fistula. Overall treatment of fistula is eradication of sepsis without sacrificing continence.

CONCLUSION: A person's Gastro Intestinal Tract extends from mouth to anus. Whenever a person suffers from any disorder of mouth, it is visible to self as an early stage and treatment becomes easy. At the same time, any disease of the anus is invisible to self; hence the severity of the lesion is not felt by self. The causes of anal lesion solely depend on food we take, hygiene we maintain. Less spicy, less salt hygienic food taken at regular interval, keeps the anal tract healthy. Balance diet with lot of watery vegetables, fruits and intake of water as medicine helps in keeping the tract clean and healthy.

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