



Review Article

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DIFFERENTIAL DIAGNOSIS OF BLEEDING PER RECTUM AND AYURVEDIC STYPTIC MEASURES: A REVIEW

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ABSTRACT

A greater part of the population has experienced rectal bleeding at any stage of their life span. Bleeding per rectum is the commonest but alarming symptom of all the anorectal complaints of the patients attending OPDs. Many of the general practitioners involved in rural areas, detain per rectal and proctoscopic examination of anorectal primary care patients, consequently, most of the serious illnesses may forego undiagnosed and could become life-threatening and economically overburden the patient. Differential diagnosis plays a key role in treating effectively. Ayurvedic literature has accredited several diseases with symptoms of bleeding per rectum. In most of the pittaja and raktaja variety of pakvashayagata (related to the colon) and gudagata rogas (related to anus & rectum), bleeding per rectum is the commonest symptom. The literature has given the number of etiological factors and many ailments causing bleeding per rectum such as age, habitat, food habits, occupation, and habits. Detailed history regarding these and nature of bleeding, amount of bleeding, colour etc. may certainly help to differentiate the diseases. This article highlights disease wise features and nature of bleeding, recommended investigations and colonoscopic examination which will differentiate and confirm the diagnosis. And also lists out several Ayurvedic styptic medicines which facilitate the cessation of bleeding when used judiciously according to dosha and vyadhi avastha.

Keywords: Bleeding Per Rectum, Ayurveda, Arshas, Gudagata Raktasrava, Ayurvedic styptic measures, styptic therapy, rectal bleed.

INTRODUCTION

Most of the population have experienced rectal bleeding at any stage of their life span. Bleeding per rectum is the commonest but alarming symptom of all the anorectal complaints of the patients attending OPDs. Every such case needs to be focused on, detailed history, and thorough examination, which indeed helps early diagnosis of serious life-threatening diseases like Ca of Colon, Diverticulosis etc. Differential diagnosis of bleeding should be the foremost schema of the doctor to stratify high-risk conditions. Acute overt lower gastrointestinal bleeding (LGIB) accounts for approximately 20% of all cases of GI bleeding, usually leads to hospital admission with invasive diagnostic evaluations, and consumes significant medical resources¹. Rectal bleeding has a prevalence of 14% to 19% in adults². An estimated incidence of 8.3 and 7 in 1000 persons per year underscores the importance of this symptom in general practice³. 44.9% of general practitioner referrals for colonoscopy presenting rectal bleeding found serious abnormalities. Since rectal bleeding is a cardinal symptom of many colorectal diseases including colorectal cancers, its presence alone could give insight into the prevalence of these conditions⁴.

Ayurvedic literature has accredited several diseases with symptoms of bleeding per rectum. In most pittaja (Pitta predominant) and raktaja (Rakta predominant) varieties of pakvashayagata (related to the colon) and gudagata rogas (related to anus & rectum), bleeding per rectum is the commonest symptom. Gudagata Raktasrava (Bleeding per rectum), Daha (burning sensation), Vibandha (constipation),

Vedana, Toda (pain), ankura (mass per rectum), srava (discharge) and daurbalya (weakness), etc. are frequent symptoms, patient expresses during consultation.

Many of the general practitioners involved in rural areas, detain per rectal and proctoscopic examination of anorectal primary care patients, consequently, most of the serious illnesses may forego undiagnosed and could become life-threatening and economically overburden the patient. Widomska *et al*, in 2001, reported a study of 548 consecutive patients referred with abdominal and/or anal symptoms were interviewed and examined. Of the 63% who believed they had haemorrhoids, only 18% were found to have haemorrhoids on proctoscopy, like the prevalence in the group who did not believe they had haemorrhoids (13%). Interestingly, symptoms were similar in both groups. The data suggest that most people who believe they have haemorrhoids are mistaken. The study also supports the idea that symptoms linked to haemorrhoids may have other causes⁵. Consequently, there is a need for attentive physical, proctoscopic examination of every case of anorectal presentations.

CAUSES OF BLEEDING

Causes of bleeding vary from dietary changes to Carcinomas. Ayurveda has described various causes for rectal bleeding. The diseases produced because of Rakta dushti and Pitta dosha have rectal bleeding as a symptom and also directs treatment modalities according to diseases.

Basic Elements

Age

Causes of rectal bleeding is myriad across the lifetime and change according to age. The pediatric population commonly encounters most usually with enterocolitis and intussusceptions whereas intestinal malignancies and diverticulosis are diagnoses associated with ageing. In neonates and infants, it is most likely to have a congenital cause. Toddlers and school-aged children are more likely to have an infectious and/or inflammatory process in addition to congenital abnormalities. Teenagers and young adults are found to have inflammatory and/or autoimmune conditions. Older adults most commonly have neoplasms, among other degenerative causes⁶. Ayurveda has also accredited references regarding Sahaja Arshas (congenial haemorrhoids), Gudabramsha (Rectal prolapse) for which various causes including hereditary and genetic causes and treatment have been enlightened^{7,8}.

Place of residence

The population residing in dry and hotter areas is prone to have rectal bleeding than in other areas.

Occupation

People working in night shifts, prolonged standing jobs, excessive travelers, have often got more prevalent.

Food habits

People indulged in spicy, sour, grains such as yavaka, uddalaka, and koradusha, in excess quantities, along with other food items that are ushna (hot in potency) and tikshna (sharply acting) such as legumes of nishpaava, black gram, horse gram and alkali, or with curd, whey, or sour gruel. The meat of pig, buffalo, sheep, fish, and cow. Vegetables of oil cake, pindalu (a tuber) and dried pot herbs. Upadamsha (chutney or salad) of radish, mustard, garlic tend to cause bleeding⁹.

Habits

Smoking and alcohol consumption also may contribute to bleeding.

Systemic causes of Rectal bleeding

Hepatic System

Cirrhosis of the liver, Portal H/T.

GIT System

Duodenal ulcer, Gastric ulcer, Diverticulitis, Crohn's disease, Ulcerative colitis.

Anorectal System

Fissure-in-ano, CA of Rectum, Haemorrhoids, Abscess.

Infective Disorders

Cholera, Malaria, Amoebiasis, Dengue, Typhoid, Viral.

Congenital

Polyps: congenital polyp, Peutz-Jeghers syndrome, Familial polyposis coli (FPC), Meckel's diverticulum, Hereditary haemorrhagic telangiectasia,

Inflammatory

TB ulcers, Enteric ulcers, Crohn's ileo-colitis, Ulcerative colitis, Necrotizing enterocolitis, Dysentery – Amoebic, Bacillary.

Neoplastic

Papilloma of the rectum, Carcinomas of colon and rectum, GIST (Gastrointestinal Stromal Tumors), Lymphomas, Carcinoma small bowel.

Vascular

Angiodysplasia (painless and massive), Ischemic colitis, Vasculitis-polyarteritis nodosa Hemangioma.

Clotting Disorders

Hemophilia, Thrombocytopenia, Leukemia, Warfarin therapy, Disseminated intravascular¹⁰.

Causes based on site of origin

Perianal Region

Prolapsed Rectum & Piles, Ruptured perianal Haematoma, Ruptured anorectal abscess, injury, Condylomata, Carcinoma, Skin excoriation.

Anal Region

Haemorrhoids, Fissure in ano, Mucosal Prolapse, Ulceration (Crohn's Disease), Carcinoma, Fistula in ano.

Colorectal causes

Diverticular diseases, Various types of Polyps, Villous adenoma, Carcinoma, Ulcerative Colitis, IBS, Endometriosis, Haemangioma.

Small Intestine

Intussusception, Crohn's disease, Meckel's Diverticulum, Tumours.

General Causes

Blood Dyscrasias, Drugs, Liver Failure, Renal Failure¹⁰.

COMMON DISEASES WITH BLEEDING PRESENTATION

Haemorrhoids (Arshas)

Acharya Sushruta has clearly stated that only pittaja and raktaja variety of arshas have bleeding per rectum and complications of bleeding will manifest. There is no mention of bleeding in vataja, kaphaja variety of arshas¹¹. Vagbhatacharya and Charakaacharya have classified arshas into shushkarshas (Dry Variety) as vatakaphaja arshas and Ardrarshas (wet/moist) as rakta and pittaja variety. Both have mentioned bleeding per rectum as a symptom only in Ardra arshas variety^{12,13}.

Haemorrhoids are dealt with rationally under the concept of Arshas. Haemorrhoids are common, affecting between 20 and 50% of the population and resulting in four million office and emergency visits annually¹⁴. In internal Haemorrhoids, bleeding is the main symptom in 1st degree and early stages of 2nd degree. It will be bright red, persistent, profuse, and occurs along with defecation. Usually, fresh splashes in the pan are observed as the stool comes out. As internal piles originated above the dentate line they are painless unless complicated. If they are associated with pain the clinician has to be alert to the possibility of another diagnosis. Profuse haemorrhage is also seen and the bleeding mainly occurs externally. Even after the retraction of prolapsed pile mass, the bleeding may continue internally. In these circumstances, the rectum is found to contain blood. Third and fourth-degree piles may discharge mucus. Thrombosed strangulated pile masses are very painful. External haemorrhoids are sometimes painful and bleeding is very minimal or absent.

Diagnosis can be confirmed by thorough inspection and proctological examination. The presence of red mucosal bulge characteristically at 3, 7 and 11'O clock positions into the proctoscope confirms the diagnosis. Based on the size, prolapse and reducibility of the pile mass, the degrees should be designated and accordingly treated. External haemorrhoids are visible and covered by skin.

Fissure in ano (Parikartika)

Parikartika, although an elaborative explanation is not found in the classics, it has been explained in a scattered manner as a complication of various diseases like Vataj Jwara (Fever of Vata origin), Vataja Pakwa Atisara (Diarrhoea), Sahaja Arshas (Congenital haemorrhoids), Kaphaja Arshas (haemorrhoids of Kapha origin), Arshas Purvarupa (prodromal symptoms of haemorrhoids), Udavarta and in Grahani (irritable bowel syndrome), illicit administration of purgatives or enema¹⁵. Fissure in ano can be considered as Parikartika as per the classical description of signs and symptoms.

Fissure in ano is the most troubling and painful condition among all 30-40% of anorectal diseases¹⁶. Where bleeding and burning sensations are major complaints. The crucial and sole cause of commencement of fissure is constipation. The primary symptoms are severe excoriating burning pain lasting for 1 hour or more after defecation and bleeding. 71.4% fissure in ano patients present with bleeding. Blood will be bright red in colour, small in amount, usually, streaks of blood along with stool or blood in the tissue paper can be appreciated or occasionally blood may drip into the toilet bowl. Profuse bleeding is very rare. Discharge may indicate an inter-sphincteric abscess or a fissure fistula.

Insightful examination in acute cases may portray fissure/ulcer/crack/ Longitudinal posterior tear with surrounding oedema & Inflammation at 6 or 12'O clock position which often heals spontaneously. The sphincter will be hypertonic and painful and always associated with spasms of sphincters. Whenever acute fissure fails to heal, deeply undermined ulcer with continuing infection and oedema develops gradually and hypertrophied papilla/ skin tag named Sentinel pile can be appreciated anteriorly or posteriorly. The fissure may be secondary to Crohn's disease, Ulcerative colitis, Tuberculosis, syphilis and carcinoma.

Carcinomas (Arbuda)

All varieties of carcinomas are distinctively considered under one heading- Arbuda. Among them, the raktaja variety Gudagata arbuda (Ca of the rectum) is prominent to cause profuse bleeding.

Colorectal cancer is the third most common non-cutaneous malignancy in the United States and the second most frequent cause of cancer-related deaths. In 2015, an estimated 132700 cases of colorectal cancer were diagnosed and accounted for 49,700 deaths¹⁷. Of these cancers, 30% will arise in the rectum. Colon cancer accounts for the third leading cancer-related cause of death in India². The evaluation of rectal bleeding is different from screening because the risk of serious disease is higher and it is unclear whether early diagnosis and treatment of serious disease result in improved mortality once gross bleeding has occurred². Historical information and the presence or absence of haemorrhoids have not been shown to reliably differentiate benign from serious disease.

The diagnosis, staging and treatment regimens for rectal cancer differ significantly hence initial attempts of evaluation by primary care providers are very crucial. Bleeding is the main, consistent and earliest symptom which is bright red, painless and usually slight in the amount in the initial stages which occurs with stool or at the end of defecation. Sometimes may be seen as a spot on tissue paper or may stain undergarments. Bleeding from carcinomas in early stages mimic bleeding from uncomplicated internal pile mass. Many symptoms associated with colorectal cancer have been described, with the main ones being rectal bleeding, diarrhoea, Alteration of bowel habits, sense of incomplete defecation and mucus along with blood, weight loss, abdominal pain, and anaemia are commonly associated symptoms¹⁷. Early morning diarrhoea is another symptom patients predominantly present with, where the patient passes lots of blood and mucus in addition to faeces¹⁰. Signs and symptoms associated with rectal cancer are non-specific but can guide primary care physicians in their referral decisions.

Perhaps the most essential and useful test, supportive in 90% of rectal carcinoma, is a digital rectal examination (DRE). The examiner should first inspect for any visible external lesions on the perianal skin including external haemorrhoids. Baseline sphincter function should be assessed and documented. The examiner should note the superior-inferior extent, circumferential involvement, and distance from the anal verge of any palpable masses. The examiner should also note whether the mass appears fixed to the sphincter muscles, pelvic sidewall, or adjacent pelvic organs¹⁸. Nevertheless, DRE is not an adequate screening tool and even when rectal cancer is diagnosed, the associated findings do not correlate with the degree of tumour invasion¹⁹.

The patient has to be referred for Flexible sigmoidoscopy followed by air contrast barium enema, biopsy or colonoscopic procedures and Magnetic resonance imaging (MRI), which can be considered as potential strategies for differential diagnosis of cancers.

Ulcerative Colitis: (Raktaatisara)

Ulcerative colitis (UC) is a chronic inflammatory disease affecting the colonic mucosa and sub-mucosa that most commonly presents with blood in the stool and diarrhoea. Symptoms can include bloody diarrhoea, urgency, incontinence, fatigue, increased frequency of bowel movements, mucus discharge, nocturnal defecations, and abdominal discomfort (cramps)¹⁹. Ulcerative colitis is classified by the extent of colonic involvement. The clinical presentation might vary based on disease extent. Patients with proctitis might predominantly have urgency and tenesmus (sensation of incomplete evacuation), while in pancolitis, bloody diarrhoea and abdominal pain might be more prominent¹⁹.

Emotional stress, acute illnesses, diet changes will be causing a relapse of Ulcerative colitis. Painful passage of small watery stool mixed with mucus, blood, pus will be present in a chronic and continuous variety of Ulcerative colitis. Related symptoms to bleeding, radiological and colonoscopic evaluation will wind up the diagnosis.

Physical examination might be evidenced for signs of anaemia, abdominal tenderness, and blood on rectal exam. Abdominal distention and tympany on percussion might indicate colonic dilatation, requiring prompt radiological assessment. Anal fissures or sentinel tags often may be associated with patients of

Ulcerative colitis due to irritation from diarrhoea, but the presence of anal or perianal fistulas should raise suspicion for Crohn's disease¹⁹.

The diagnosis of ulcerative colitis is based on a combination of symptoms, endoscopic findings, histology, and the absence of alternative diagnoses²⁰. All patients with possible Ulcerative colitis should have stool assessments (stool culture and Clostridium difficile assay) to rule out enteric superimposed infections. Patients might have anaemia, iron deficiency, leukocytosis, or thrombocytosis. Hypoalbuminemia can be observed in severe disease, in which it is a predictor of colectomy and poor response to biological drugs^{21,22}. Markers of inflammation, such as ESR and C-reactive protein, will be elevated in severe Ulcerative colitis, and normal in mild to moderate Ulcerative colitis. Endoscopy with biopsies is the only way to establish the diagnosis of ulcerative colitis. CT and MRI might show a thickened, haustral colon, but are not sensitive or specific enough to be diagnostic tools²³.

Ulcerative colitis features resemble the classical symptoms quoted for Raktaatisara, like Atipravahana of Purisha (repeated defecation), Atidrava Purisha Pravritti (watery stool), Udarashoola (pain abdomen), Picchila, Saphena (sticky and frothy), and Raktayukta Purisha (Blood mixed stool)²⁴.

Fistula in ano: (Bhagandara)

Fistula-in-ano is one of the most common anorectal diseases in which the chronic granulating track runs from the anal canal or rectum to the perianal skin or perineum and is associated with considerable discomfort and morbidity to the patient. The incidence of fistula-in-ano in rural areas was grossly around 8.6 per 1 lakh population and the male: female ratio was 11.8:1²⁵.

The diagnosis can be made based on symptoms such as pustule at the perianal region, pus discharge mixed with blood and perianal pain. Often the patients, report the condition as piles to the doctor. Primary care providers may miss the diagnosis and treat it as piles. Unless the doctor performs per rectal examination, the disease cannot be differentiated. Per anal examination, findings revealing external opening and per rectal digital examination confirming the internal opening of fistula-in-ano will confirm the diagnosis. Puss mixed with blood discharge from the internal opening can be appreciated during the digital examination. Radio imaging like fistulogram, Sonofistulogram, MRI will aid in finding out the track details.

Ayurveda has accredited elaborative knowledge on Bhagandara, the most typical signs and symptoms of Bhagandara are a discharging Vrana or Pidika (Pustule) within two-finger periphery of the peri-anal region with a history of Bhagandara pidika (Pustule), which is painful, bursts many times, heals, and recurs repeatedly. Ayurveda offers multi-dimensional treatment modalities in the treatment of Bhagandara. Acharya Sushruta has described preventive and curative (Para-surgical and Surgical) measures of the disease in detail. Ksharasutra treatment is an effective treatment modality in the treatment of Bhagandara^{25,16}.

Amebic Colitis

Amebic colitis is one of the inflammatory bowel disorders, typical characteristic feature is diarrhoea, which may be watery or bloody and present with abdominal cramps, pain/tenderness, and weight loss. The presentation may be acute or more gradual, and amebic colitis may also present similarly to inflammatory

bowel disease (IBD). It may not be possible to distinguish amebic colitis from IBD even by imaging, inflammatory markers, or endoscopy, and the colon may appear friable, with diffuse ulceration by gross examination and fulminant forms of amebic colitis²⁶. Patients may be toxic in appearance, febrile, and hypotensive, with profuse bloody diarrhoea, abdominal pain, distension, and signs of peritonism²⁷.

Stool Microscopy and Stool antigen detection have variable sensitivity and specificity, particularly in low-endemic areas. Stool PCR is extremely sensitive. It is considered the gold standard for the diagnosis of amebiasis. Ultrasonography, abdominal computed tomography (CT), and magnetic resonance imaging are all good modalities to detect liver abscesses²⁷.

Diverticular diseases

Diverticular disease of the colon (DDC) includes a spectrum of conditions from asymptomatic diverticulosis to symptomatic uncomplicated diverticulosis, segmental colitis associated with diverticulosis, and acute diverticulitis without or with complications that may have serious consequences²⁸. Diverticular haemorrhage is the most common cause of lower gastrointestinal bleeding. Among patients with diverticulosis, diverticular bleeding occurs in approximately 5–15% and is massive in one-third of patients. The prevalence of hospitalizations per 100,000 persons for diverticular bleeding decreased over 10 years from 32.5 to 27.1 in the United States. Two-thirds of lower GI Bleeding cases are of Diverticulosis. In these cases, bleeding is characteristically sudden, painless, unexpected, and profuse from the onset. but is difficult to diagnose and is most commonly a presumed diagnosis, making research difficult.

Routine blood tests may reveal a leukocytosis with raised CRP or ESR. The amylase may be elevated in peritonitis or perforation. Urinalysis may reveal sterile pyuria secondary to inflammation of the adjacent sigmoid colon²⁹.

Despite early reports to the contrary, CT is no more specific than a contrast enema in the diagnosis of acute diverticulitis. Radionuclide scans have little role in the routine assessment of acute diverticulitis and magnetic resonance imaging has not been adequately evaluated. Water-soluble contrast enema is safe, widely available, and probably the most useful early supplementary investigation³⁰.

Rectal polyp

Juvenile polyps occur within the age group of 15 years. Children complaining of streaks of blood on stool must be checked for the rectal polyp. On per rectal and proctoscopic examination, oval-shaped, nearly spherical, always pedunculated lesion of 3-10 mm in diameter can be observed. It is usually smooth, reddish-brown, and covered with a mucus membrane.

Investigations

Complete blood profile, Clotting time, Bleeding time, Prothrombin time, Activated partial thromboplastin time (APTT), Occult stool analysis will aid final diagnosis.

Endoscopic examinations viz, sigmoidoscopy, colonoscopy, and Radiological Examination: Barium enema, Barium meal, CT and MRI will confirm the diagnosis. In unusual growths, the Histopathological study of Biopsy will emphasize diagnosis.

DIFFERENTIAL DIAGNOSIS

Nature of Bleeding

Focused history regarding bleeding, its amount, colour and relation with faeces & defecation will facilitate preliminary diagnosis.

Amount of Bleeding

Patients suffering from a fissure in ano sometimes have bleeding in drops and streaks over the stool. In the initial stages of internal piles too may bleed in drops and most of the time in splashes. Ca of Rectums also bleeds in splashes or spray like in the pans.

Colour of blood

The site of origin is predictable by the colour of the blood.

- Bright red – rectum or anal canal
- Dark red – ascending, transverse, descending or sigmoid colon
- Black – i.e., melaena – small intestine or higher

Relation of bleeding to defecation

Table 1: Relation of bleeding to defecation

Relation with faeces	Origin
Blood mixed with faeces	Bowel higher than sigmoid colon
Blood on the surface of faeces	Rectum or anus
Blood separate from faeces other time than defecation	Bleeding carcinoma, diverticulitis, diverticulosis, ulcerative colitis, polyps, prolapsed piles,
Blood in the toilet paper	Minor bleeding from anal skin – a fissure in ano or external haemorrhoids.

Bleeding with pain

Patient approaching with pain associated with bleeding per rectum may be differentiated between Fissure in ano, Complicated piles, Ca. of Anal Canal, Ruptured perineal hematoma, Ruptured anorectal abscess and Injuries to the anal canal¹⁰.

Bleeding without pain¹⁰

Diseases presenting bleeding per rectum without the association of pain are sorted out below.

- Blood alone – Polyp, Villous adenoma, Diverticular diseases
- Blood after defecation – Haemorrhoids
- Blood with Mucus – Ulcerative Colitis, Crohn's Disease, Intussusception, Ischemic colon, Fistula in ano, Ischeorectal abscess. Perianal abscess.
- Blood mixed with stool – Bowel higher than sigmoid colon, Ca of colon
- Blood streak on the stool – Ca of rectum, Fissure in ano

Bleeding as a symptom is observed in Raktaja Gulma, Jwara (Mantara), Mrudbakshanajanya Pandu, Raktapitta, Gudapaka, Gudabramsha, Sanniruddha guda, Vidradhi, Bhagandara, Abhighata, Parikartika, Raktaja Arbuda, Pranasta Shalya, Koshtashrita Kamala (portal hypertension). Detailed history and cautious examination of the patient with dosha amshamsha kalpana will help to diagnose and treat.

Ayurveda formulations that may cause bleeding per rectum are Ichhabedi rasa, Abahyadi modaka (Dantee), Trivrut Leha, Jayapala and its formulations, Katuki and its formulations.

Food causing bleeding

Excessive use of ushna (hot potency), teekshna, katu (spicy), amla (sour), lavana (salt), vidahi and pitta prakopaka ahar may cause bleeding. ex: Mulaka (*Raphanus sativus* Linn.), Sarshapa (*Brassica campestris* Var.), *Brassica rapa* - turnip, *Napa cabbage*, Lashuna (*Allium sativum* Linn.), chilly etc.

Modern drugs

Certain modern drugs are known to cause bleeding per rectum ex: Anticoagulants, Antiplatelets, NOA's (Novel Oral Anticoagulants)- Dabigatran, apixaban, NSAIDs, (Non-Steroidal Anti Inflammatory Drugs), SNRI's (Selective-norepinephrine reuptake inhibitors)- duloxetine, desvenlafaxine, SSRI's (Selective serotonin reuptake Inhibitors)- Citalopram, Escitalopram, Fluoxetine, Fluvoxamine. History of drug intake must be taken to rule out drug-induced bleeding.

TREATMENT: STYPTIC MEASURES

Thereafter assessment of the patient's condition, every clinician should contemplate stoppage of bleeding with styptic therapy and hemodynamic resuscitation such as regularizing blood pressure, heart rate and fluid imbalance. In severe conditions stabilization of the patient, blood transfusion, Platelet transfusion and other vital measures have to be engaged.

The herbs or formulations possessing sheeta veerya (cold potency), stambhana (styptic), rakta prasadana (pacifying blood), pitta shamaka (alleviate pitta) and rechaka (mild purgative) features will relieve haemorrhage. Ayurveda has described many such efficient styptic formulations.

Tablets

Kamadugha Rasa with Muktha, Chandrakala Rasa, Bolabaddha Rasa, Gandhaka Rasayana, Kankayana Vati, Laghusootashekhara rasa, Bola parpati, 1 to 3 tab BD or TID with suitable anupana (adjuvant liquid).

Churna (Powders)

Avipattikar Churna 50 grams + Godanti Bhasma 10 grams powder mixture 1 to 2 tsp HS or BD with warm water as anupana.

Asavarista

Sarivadyasava, Chandanasava, Useerasava, 10 to 15 ml with warm water, 2-3 times a day.

Lehya

Kushmanda Avaleha, Vasa avaleha, 1 -2 teaspoons with milk or hot water 1-2 times a day.

Ghirta (Medicated Ghees)

Vasa Ghirta, Shatavari Ghirta and Durvadi Ghirta etc. 2-3 teaspoons, early in the morning on empty stomach with warm milk or warm water.

Judicial use of any of these drugs according to prakruti (Body constitution) of patient and dosha amsamsha kalpana (Minute variations in the properties of dosha) will facilitate haemostasis. Based on the final diagnosis after a thorough examination, the respective treatment protocol will yield beneficial results.

The following drugs either alone or with mutual combination may also yield styptic action. Sariva (*Hemidesmus indicus*), Nagakesar (*Mesua ferrea* Linn.), shuddha Laksha (*Laccifer lacca* Kerr.), Doorva (*Cynodon dactylon*), Gairika (Red ochre), Usheera (*Vetiveria zizanioides*), Chandana (*Santalum album* Linn.), Praval pisthi (*Coral calcium*), Lodhra (*Symplocos racemosa* Roxb.), Manjistha (*Rubia cordifolia* Linn.) Mocharasa (gum of *Salmalia malabarica*), Padmaka (*Prunus cerasoides* D. Don), Parpata (*Fumaria parviflora*), Vasa (*Adathoda vasica*), Yasthimadhu (*Glycyrrhiza glabra* Linn.), Kumkuma (*Crocus sativus*), Lajjalu (*Mimosa pudica* Linn) and Priyangu (*Aglaia elaeagnoides*)³¹ etc. these drugs can be used either in the form of powders, (6 to 12 grams BD or TID), or in the form of decoction (10 to 15 ml with 45 to 60 ml of lukewarm water BD or TID), or the form of tablets (2 to 3 tab BD or TID).

Charaka acharya has advised few drug combinations like kutaja twak kashaya with shunthi, dadimatwak and Chandan kashaya with shunthi churna; raktachandana, kiratatikta, dhanvayasa kashaya and shunti, daruharidra, twak, usheera, and nimba twak kashaya may be beneficial in controlling bleeding³².

Along with styptic therapy, laxatives or stool softeners, play a very important role as constipation is the major cause of bleeding. The formulations possessing Vibandhahara, deepana, pachana, and anulomana or rechana properties like Avipattikar churna, Haritaki churna, Vyoshadi Churna triphala churna, Isabgol (1 to 2 tsp HS); Sukumar Gruta (1 to 2 tsp with hot water or milk OD), Abhayarista, Dantyarista, Pathyadi Kashaya, (2 to 3 tsp with warm water); Manibhadra Guda, Trivrutta lehya (1 to 2 tsp HS with hot water) etc will facilitate the smooth passage of stool thus minimises bleeding^{32,33}.

Dietary lifestyle is relevant for the prevention and treatment of various colorectal conditions. Bowel health is that state where the individual is satisfied with defecation, the diet does not create undue risk for disease and luminal contents maintain an intact and functional mucosa³⁴. Ayurveda has specified paramount significance to the ailment wise diet plans (Pathyaapathya). Some references advise the consumption of food consisting of the cereals of Shali (rice) namely Shashtika (rice which grows in 60 days), nivara, koradusha, prashantika, shyamaka and priyangu, lentils, green grams, makustha (kidney beans), and adhaki (Pigeon pea) for pulse-soup in the context of anorectal diseases³². Studies have indicated that a high-fiber diet can increase stool weight, resulting in a decreased colon transit time, while a poor-fiber diet induces constipation³⁵. Adequate fiber and resistant starch, Low fat, water-rich diet, and plenty of water intake can improve constipation and anorectal conditions. Spinach and other green vegetables, legumes, sweet potato, beans, fruits like prunes, bananas, apple, kiwi, pears, figs, citrus fruits, may support to pacify bleeding by relieving constipation.

The patient certainly must avoid fast foods, excessive chilly, non-fiber foods, fast food, meat, prepared foods, frozen meals and snack foods, processed foods, sedentary lifestyle, night shifts, prolonged sitting and standing and inadequate water intake.

Avagaha (Warm sitz bath) with yasthimadhu, chandana, usheera, sariva, kashaya will also control bleeding per rectum³².

American Society of Colon and Rectal Surgeons recommend increased fluid and fiber ingestion, sitz baths, and the use of stool softeners³⁶. Sitz bath helps to relieve sphincter spasms and thereby relieve pain.

CONCLUSION

The optimal evaluation strategy for rectal bleeding is unknown. Neither historical information nor the presence or absence of haemorrhoids has been shown to reliably differentiate benign from serious disease. Faecal hemoccult testing is not a viable evaluation option for these patients as by definition they have observed blood in or on their stools. Potential strategies for investigation include watchful waiting, flexible sigmoidoscopy followed by air contrast barium enema or colonoscopy. Focused history, insightful examination of the patient, necessary investigations only can conclude the diagnosis. Stopping bleeding is considered to be a primary and essential strategy for every case. Disease severity wise treatment protocols (conservative and surgical) has to be planned. Sensible use of the above said ayurvedic styptic formulations according to the dosha and vyadhi avastha (Doshic and disease stages) may control bleeding per rectum.

Collectively, precise diagnosis, anyone or two of styptic formulation, a laxative (stool softener), avagaha (warm sitz bath) and deliberate practice of pathyaapathya (Do's and Donts) are imperative measures to control bleeding in anorectal conditions. However uncontrolled severe cases may certainly need interventional surgical procedures.

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