

Rectitis Radiation a Problem of Therapeutic Management in Senegal about Two Cases

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Abstract

Radiotherapy occupies an important place in the management of cancers of the pelvic-perineal organs, it is at the origin of the fact of the ionizing radiations of radiation proctitis which is most often revealed by hematochezia. Diagnosis is based on rectoscopy which highlights a telangiectatic proctitis aspect. The standard treatment is endoscopic and based on argon plasma electrocoagulation. We report two cases of radiation proctitis occurring a few months after radiotherapy. Case number 1: A 76-year-old hypertensive patient known to have a history of cancer of the cervix treated with radiochemotherapy, she was received in an array of hematochezia of medium abundance; total colonoscopy found an aspect of telangiectatic proctitis making retain radiation proctitis. She had benefited from medical treatment, however, after a two-month follow-up, there was a recurrence of rectal bleeding despite medical treatment, due to the unavailability of endoscopic treatment based on argon plasma, surgical treatment of a type of proctectomy had been carried out on postoperative follow-up was marked by a regression of hemorrhage with the occurrence of a. Case number 2: An 87-year-old patient, hypertensive, with a history of prostate adenocarcinoma 3 years ago treated with brachytherapy and hormone therapy; he was hospitalized with hematochesia. Rectosigmoidoscopy found an aspect of telangiectatic proctitis. The diagnosis of radiation proctitis had been retained and the patient had received medical treatment. The short-term evolution was marked by an amendment of the hematochezia with a long-term recurrence requiring endoscopic destruction via the diathermic loop of the telangiectatic lesions with good evolution without relapse after the procedure. Conclusion: Radiation proctitis is a major side effect of pelvic radiotherapy. Management is very difficult in our regions due to the unavailability of endoscopic means, in particular argon plasma.

Keywords

Radiation Proctitis, Hematochesia, Telangiectasias

1. Introduction

Radiotherapy occupies a growing place in the treatment of cancers of the pelvic-perineal organs. Despite the precautions taken in carrying it out, local complications can occur, linked to the effects of ionizing radiation on the tissues [1]. The rectum is frequently affected by its side effects giving rise to radiation proctitis which is most often revealed by hematochezia [1]. We report two cases of radiation proctitis occurring within 6 to 12 months after radiotherapy aimed at pelvic tumor reduction.

2. Observation

Case number 1

This was a 76-year-old hypertensive patient known for 06 years on Amlodipine 10 mg (1 tab/d) with a history of cancer of the cervix approximately 16 months ago before which she had benefited from a radiotherapy a type of brachytherapy 60 g per week for 6 weeks and chemotherapy based on Cisplatin and Paclitaxel declared in tumor remission after 3 months of treatment; she was received in a table of rectal bleeding of average abundance occurring at the beginning of stool accompanied by dyschezia and fetid leucorrhoea. The physical examination on admission found clinical anemia, hypogastric sensitivity without defense or contracture, an alteration the general condition who 1, the digital rectal examination had not found hemorrhoidal prolapse or anorectal tumor. On the biological level, we noted on the numeration formula a hypochromic microcytic anemia at 7 g/dl, the liver and kidney tests were normal, esophagogastroduodenal fibroscopy found an aspect of erosive antral gastritis and total colonoscopy found an aspect of telangiectatic proctitis associated with non-specific erosive lesions, the rest of the colon was normal; biopsies had been performed and histology was in favor of non-specific fibrous proctitis ruling out neoplasia and a solitary rectal ulcer; the abdominal CT scan was normal and showed no signs of ischemic proctitis. The diagnosis of radiation proctitis had been retained in view of his history of radiotherapy and the telangiectatic appearance of the rectum on lower endoscopy; the patient had received a blood transfusion; rectal enemas of aluminum salts (4g/d) and corticosteroids (Prednisone 40 g/d). The short-term evolution (day 8) was marked by a regression of rectal bleeding but the persistence of dyschezia was still noted. After a two-month follow-up, there is a recurrence of rectal bleeding despite good compliance with medical treatment, a second lower endoscopy had been performed and had shown the same telangiectatic lesions as the first due to the severe impact of rectal bleeding and the unavailability of the endoscopic treatment based on argon plasma in our region a surgical treatment a type of proctectomy had been carried out the postoperative follow-up was marked by a regression of the hemorrhage with the occurrence of a massive pulmonary embolism which took the patient.

Case number 2

This was an 87-year-old hypertensive patient known for 20 years on coveram

10 mg (1 tab/day); quit smoking 39 years ago at 20 packs/year; a history of prostate adenocarcinoma 3 years ago, before which he had received brachytherapy-type radiotherapy (number of grays not specified) for 12 weeks and chemotherapy; currently on cardox cp (1 cp in the evening); ditropam 5 mg (10mg/day); he was received in a table of hematochezia of moderate abundance occurring during defecation accompanied by constipation. The physical examination on admission found clinical anemia and a deterioration in the general state OMS1, rectal examination had found a prolapse stage III hemorrhoid; on the biological level, the blood count showed a normochromic normocytic anemia at 7.4 g/dl, the renal assessment was normal. The esophagogastroduodenal fibroscopy found an uncomplicated hiatal hernia associated with an aspect of erosive and pseudo nodular antral gastritis; rectosigmoidoscopy found an appearance of telangiectatic proctitis associated with millimetric ulcerations (**Figure 1** and **Figure 2**). Histology was in favor of nonspecific chronic proctitis. The diagnosis of radiation proctitis had been retained and the patient had received a blood transfusion, rectal enemas of aluminum salts (4g/day) and corticosteroids and a laxative treatment based on lactulose, the short-term evolution was marked by an amendment of the hematochezia followed by a long-term recurrence requiring endoscopic destruction via the diathermic loop of the telangiectatic lesions with good

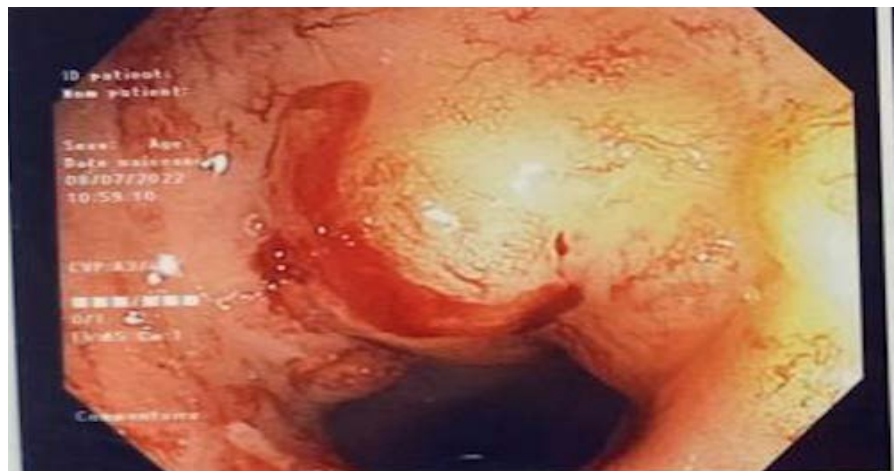


Figure 1. Aspect of telangiectatic proctitis (case number 2).

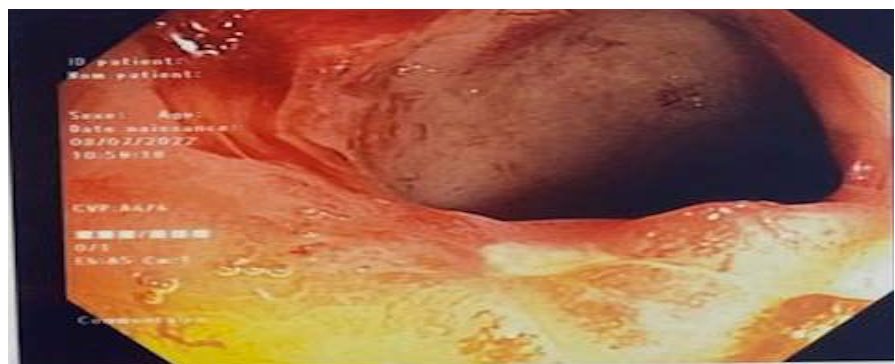


Figure 2. Appearance of telangiectatic and ulcerated proctitis (case number 2).

evolution without relapse after the procedure.

3. Discussion

Radiation proctitis is a radiation-induced rectal mucositis, occurring following radiotherapy of various pelvic malignancies [1] [2]. It is a rare pathology but its incidence is increasing due to the increasing use of curative radiotherapy. It occurs in 10% to 20% of patients after pelvi-pelvic radiotherapy within 6 to 24 months [3]. In our region only a few cases have been reported in the literature; Pathophysiologically, the pathogenesis of chronic radiation injury is complex. It involves stem cell destruction, progressive arteritis obliterans, and interstitial fibrosis reaching the full thickness of the rectal wall. These processes generate chronic, irreversible and progressive ischemia for years after radiotherapy with a possible tendency to extension. This results in superficial neovascularization in the form of mucous telangiectasias which will be responsible for bleeding [4]. The clinical manifestations are dominated by rectal bleeding, often moderately abundant at the start of stool, disabling, with clinical discomfort and haematological repercussions which may require iron supplementation or blood transfusion sessions [5]. Rectal bleeding is often associated with exemptions repeated and imperious, a tenesmus, false mucous needs [6]. In our patients, the main warning sign was rectal bleeding, which was disabling and was associated with dyschezia and false needs, thus requiring hospitalization. Several factors can contribute to the occurrence of radiation proctitis, namely a dosimetry exceeding 45 Gy and the risk is higher when the dose exceeds 70 Gy; mode of radiation therapy, brachytherapy has a higher risk than external beam radiation; time fractioning and spreading out the dose also increases the risk other factors unrelated to radiation therapy may contribute to the occurrence of radiation proctitis such as concomitant chemotherapy, clinical factors such as overweight, type 2 diabetes, advanced age (over 60), arterial hypertension, atherosclerosis and hypersensitivity to ionizing radiation of origin genetics [7] [8]. In our patients, the main risk factors found were a dosimetry greater than 45 Gy, advanced age, diabetes, hypertension, overweight in case number 2, and brachytherapy in case number 1. Endoscopically the aspect of the rectal wall is variable, the most frequent presentation is a telangiectatic proctitis resting on a frosted and whitish mucosa, this aspect is often evocative and makes it possible to retain the diagnosis without histology [9], other atypical aspects can be found such as a congestive and erosive aspect sometimes an ulcerated aspect, these aspects must have biopsies carried out in order to eliminate a proctitis of infectious origin very frequent in our regions, a rectal adenocarcinoma or a proctitis of inflammatory origin in namely ulcerative colitis or Crohn's disease [10]. In our patients, the endoscopic appearance was diffuse telangiectatic proctitis with flame-like micro bleeding. In case number 2, the pathological examination of rectal biopsy fragments found nonspecific fibrous proctitis and in case number 1, nonspecific chronic proctitis. Medical treatment is often disappointing and relies on topical corticosteroids, sucralfate, sali-

cylates and short-chain fatty acids are all administered as an enema; antioxidant and healing drugs can be administered orally such as vitamins A, C, E, estrogen-progesterone combinations and Cholestyramine [11] [12]. Endoscopic treatment provides a better prognosis and is based on argon plasma electrocoagulation, laser photocoagulation, intra-rectal injection of formalin [13] [14]. Surgical treatment should be avoided as much as possible because of the extensive rectal fibrosis, the risk of bleeding and the risk of recurrence after surgery [15]. Our patients had benefited in first intention from a medical treatment based on sulfasalazine and corticosteroids in enema associated with a regularization of the transit; a favorable short-term evolution was noted in the 2 patients with a decrease in the frequency and abundance of rectal bleeding, however a long-term recurrence was noted in the 2 patients who subsequently motivated due to the unavailability in our centers of the curative endoscopic means the realization of a surgical proctectomy with an unfavorable evolution in the case number 1 on the other hand the case number 2 had benefited from an endoscopic destruction of the lesions via the hot loop and the evolution was favorable with a regression bleeding. Thus the endoscopic destruction of telangiectatic lesions by the diathermic loop could be a therapeutic alternative in our regions insofar as endoscopic curative means are not available.

4. Conclusion

Radiation proctitis is a major side effect of pelvic radiotherapy. Several parameters (history of abdominopelvic surgery, diabetes mellitus, dosimetry) were listed, making it possible to identify patients at risk. The reference treatment is endoscopic and is based on argon plasma, the accessibility and technicality of which poses a problem in tropical environments.

Provenance and Peer Review

All authors have read and approved the document.

Consent

Patients gave consent to report cases.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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