RELATO DE CASO

COLOSTOMIA PROTETIVA EM GANGRENA DE FOURNIER

PROTECTIVE COLOSTOMY IN FOURNIER'S GANGRENE

Lucas Yago Souza Schmidt[1], Dowglas Pereira de Oliveira[1], Constância Madami Nzonzi Canda[1], Ellen Cristina Ferreira Peixoto[1], Pedro Manuel Gonzales Cuellar[2].

RESUMO

Gangrena de Fournier é uma fasciite necrotizante polimicrobiana, de evolução rápida, da região perineal, perianal e genital, podendo se estender para a raiz da coxa, parede abdominal e retroperitônio, que raramente acomete mulheres e crianças, com uma taxa de incidência global de 1,6 casos por 100.000 homens/ano e um pico de incidência após a idade de 50. Como fatores que predispõem ao aparecimento da lesão, estão à higiene ineficaz, pregas cutâneas exacerbadas, traumatismo mecânico, cateterismos prolongados e procedimentos invasivos, além de co-morbidades como diabetes mellitus, tabagismo, obesidade, etilismo crônico, hipertensão, imunossupressão, HIV e pacientes oncológicos. O objetivo do estudo é relatar o caso de uma paciente de sexo feminino, 43 anos, sem co-morbidades, com quadro arrastado de gangrena de Fournier em região perineal e genital, acompanhada no serviço de Cirurgia Geral do Hospital Geral Público de Palmas – TO, sendo submetida a colostomia em alça descendente como medida protetiva de escolha à disseminação da infecção para a cavidade abdominal, interrompendo a progressão da doença.

Palavras-chave: Fournier. Gangrena de Fournier. Colostomia. Reconstrução do Trânsito Intestinal.

ABSTRACT

Fournier's Gangrene is a rapidly evolving polymicrobial necrotizing fasciitis of the perineal, perianal, and genital region, extending to the thigh root, abdominal wall and retroperitoneum, which rarely affects women and children, with an overall incidence rate of 1,6 cases per 100,000 men / year and a peak incidence after the age of 50. Incomplete hygiene, exacerbated skin folds, mechanical trauma, prolonged catheterization and invasive procedures, as well as comorbidities such as diabetes mellitus, smoking, obesity, chronic alcoholism, hypertension, immunosuppression, HIV, cancer patients, and chronic diseases are factors that predispose to the appearance of the lesion. The objective of the study is to report the case of a female patient, 43 years old, without comorbidities, with a picture of Fournier's gangrene in the perineal region and genitalia, accompanied by the General Surgery Service of the General Public Hospital of Palmas - TO, and submitted to colostomy in a descending loop as a protective measure of choice for the spread of the infection to the abdominal cavity, interrupting the progression of the disease.

Keywords: Fournier. Fournier's Gangrene. Colostomy. Reconstruction of Instestinal Transit.

ACESSO LIVRE

Citação: Schmidt LYS, Oliveira DP, Canda CMN, Peixoto ECF, Cuellar PMG (2020) Protective colostomy in Founier's gangrene. Revista de Patologia do Tocantins, 7(1):.62-65

Instituição:
[1]Acadêmico(a) do Curso de Medicina, Universidade Federal do Tocantins, Palmas, Tocantins, Brasil.
[2]Professor do Curso de Medicina, Universidade Federal do Tocantins, Palmas, Tocantins, Brasil.

Autor correspondente: Lucas Yago Souza Schmidt; lucasschmidt1901@hotmail.com

Editor: Guedes V. R. Medicina, Universidade Federal do Tocantins, Brasil.

Publicado: 28 de junho de 2020.

Conflito de interesses: os autores declararam que não existem conflitos de interesses.

INTRODUCTION

Fournier's Gangrene is a necrotizing fasciitis of bacterial origin, associated with aerobic and anaerobic microorganisms, of the perineal, perianal and genital region, and can extend to the thigh root, abdominal wall and retroperitoneum, with rapidly evolving gangrene that rarely affects women and children, predominantly in men, affecting all age groups, on average 50 years [1,2].

Incomplete hygiene, exacerbated skin folds, mechanical trauma, prolonged catheterization and invasive procedures, as well as comorbidities such as diabetes mellitus, smoking, obesity, chronic alcoholism, hypertension, immunosuppression, HIV, cancer patients, and chronic diseases are factors that predispose to the appearance of the lesion.[3,4].

The etiopathogenesis of Fournier gangrene is characterized by obliterating endarteritis, which results in necrosis of the skin and surrounding subcutaneous tissue and may invade fascia and muscle, making it possible to enter the normal microbiota of the skin, as the spread of bacteria occurs aerobic and anaerobic. The concentration of oxygen in the tissues is reduced with hypoxia and tissue ischemia, being impaired metabolism, which causes greater dissemination of facultative microorganisms that benefit from the energy sources of the cells, forming hydrogen and nitrogen gases responsible for the creptation [3].

The clinical picture may manifest with intense pain, erythema and edema, to blisters and scabs, in the scrotum and perineum, and may extend to the abdominal wall and thigh root, associated or not with fever and chills. Other common local manifestations include: cyanosis, crepitation and secretion with strong and repulsive foul odor. Some cases may cause sepsis early[1].

As effective therapeutic measures, management may involve extensive drainage or debridement of the entire area of necrosis, broad-spectrum antibiotics, stomata, when necessary, and dressings as a tissue repair treatment. Adjuvant measures such as hyperbaric chamber oxygenation may be employed to prevent necrosis extension, reduce systemic signs of infection, and improve survival of ischemic tissue[2,3].

Complementary surgical procedures to debridement, such as colostomy, may be indicated, in cases where there is sphincteric destruction by the infectious process, when there is rectal perforation or in cases in which there is a very extensive wound [5].

OBJECTIVE

To report the case of a female patient with a gangrene of Fournier, being submitted to a colostomy to prevent to spread the infection to the abdominal cavity, interrupting the progression of the disease.

METHOD

The information contained in this study was obtained by reviewing the medical record, interviewing the patient, photographic record of the diagnostic methods to which the patient was submitted and review of the literature. The search for virtual articles occurred through the Pubmed platform, using the descriptors Fournier, Fournier gangrene, colostomy and reconstruction of the intestinal transit. The patient was duly informed about the approach of her condition in the form of a case report, attesting agreement through signing of informed consent.

CASE REPORT

Anamnesis

DFG, female, 43 years of age, referred from the Municipality of Porto Nacional – Tocantins to the General Surgery Service of the General Public Hospital of Palmas (HGPP), due to a disseminated ulcer in the perineal and genital area started 4 months ago as a papule a digital pulp in the left gluteus, not secretive, little pruritic and painful to the manipulation. There was progressive growth of the wound in the perineum and region of the large vaginal lips, when symptoms of intense local pain with pio-hyaline secretion of fetid odor began, fever measured around 38ºC, asthenia and chills.

At the time of admission, it maintains only complaint of moderate pain in perineum, intensity 5/10, without irradiation. She reports hospitalization for about 15 days in Porto Nacional, having been discharged from hospital for 3 days and referred to the HGPP with indication of colostomy closure performed in a descending colon, in a loop, without intercurrences. In the previous hospitalization, closed diagnosis of Fournier Gangrene and also instituted broad spectrum antibiotic therapy (ceftriaxone and metronidazole) for 10 days and two debridements.

Non-alcoholic and non-smoker, it denies uro-gynecological procedures and recent urinary infections, as well as prolonged cortico- therapy, chemotherapy, and trauma with hematoma formation. He carried rapid HIV test 1 and 2 performed at the local reference service, not reagents.
Denies diabetes and other comorbidities. History of two cesareans due to progression stop, without other previous surgeries.

Resident of village in rural area near the municipality of Porto Nacional – Tocantins, divides house of 05 rooms with spouse and two children.

Physical exam

Regular general condition, pain facies, with blood pressure of 130 x 80 mmHg. Afebrile, with axillary temperature measured around 37ºC. Made a calculation of body mass index (BMI) with a result of 24.2 - discarding obesity and malnutrition. Absence of lymphadenopathy at the retroauricular, occipital, cervical, supraclavicular and axillary examination.

Respiratory auscultation with vesicular murmurs present bilaterally and without adventitious noise, respiratory rate of 18 incursions per minute. No inspiratory effort visible through the use of accessory muscles.
Flat abdomen, flaccid, with scar in the lower abdomen compatible with Pfannenstiel incision, diffusely diminished hydroaereal noises, without palpable masses and little pain to

deep palpation of hypogastrium. Colostomy bag in a descending loop, with little serohematic secretion, without phlogose.

Skin of the perineal region and large lips of the vagina, especially to the left, stiffened in a scar pattern, with no secretory outlet and absence of local phlogistic signs of heat, edema and hyperemia.

Signs of good peripheral perfusion without edema and cyanosis. Slowed gait, with evident discomfort in the lower left limb.

Conduct

Under previously established therapy, the patient was admitted to the General Surgery Service of the HGPP with resolution of the initial appearance of the lesion and the symptoms resulting therefrom, and neither antibiotic therapy nor new debridements were required. Colostomy closure and clinical and laboratory monitoring were performed in the postoperative period, given the morbidity of the procedure ranging from 0-50% and mortality from 0-4.5%6, 7.

The intestinal preparation was made with mannitol diluted in orange juice for two days, followed by the reconstruction procedure, according to the surgical act consisting of the release of mature loops of the abdominal wall, followed by the revival of the proximal and distal portions of the colon and the end-to-end anastomosis without intercurrences.

Evolution

After the procedure, the patient was admitted to the General Surgery ward for seven days, with a good appearance of the surgical site, with no signs of local pain and heat, hyperemia and edema, with residual serohematic secretion. Asymptomatic, no anemia or leukocytosis was detected in the laboratory exams, being discharged with guidelines and returned to the General Surgery outpatient clinic in 15 days. He complained on the day of hospital discharge from ambulation difficulty, bringing to the fore tissue loss on the left thigh base due to the disease.

The clinical outcome of the disease was excellent, and the colostomy in the descending loop proved to be essential to interrupt the dissemination of the lesion, considering the synergic perineal abdominal involvement characteristic of Fournier's gangrene[8].

DISCUSSION

Fournier's gangrene is a rare condition, with an overall incidence rate of 1.6 cases per 100,000 man-years and a peak incidence after the age of 50[4], unlike that described in the case presented, in which a patient is observed female with 43 years of age.

The gangrene usually results from an infection of the ano-rectal region (30-50%), uro-genital (20-40%) or genital skin (20%), resulting from trauma in these regions, described in the literature as a possible source of infection. It has been strongly associated with diabetes, chronic alcoholism, immunodeficiency virus (HIV), steroid abuse and use of toxic drugs[4]. In the case reported above the patient denies history of trauma or previous surgical procedures, as well as negates risk factors related to Fournier's gangrene.

Fournier's gangrene is a polymicrobial necrotizing fasciitis, where both aerobic and anaerobic germs are found, which may evolve in synergy, that is, affect both the genital and perianal regions[5].

The most common symptoms of Fournier gangrene include pain in the scrotal region, edema and erythema and systemic manifestations may occur[4] as in the case referred to above, in which the patient had a fever of 38° C. In the clinical manifestation of the case report, Fournier's gangrene often has an insidious onset, symptoms of pruritus, pain and general discomfort tend to worsen more than 3-5 days before admission, resulting in delayed diagnosis which is clinical associated with laboratory tests, and disease management[4].

In general, the treatment consists of broad-spectrum antibiotic therapy and immediate surgical debridements, as well as support measures such as hemodynamic and hydroelectrolytic correction. Colostomy and cystostomy may be necessary to protect the region under treatment[9], which was of fundamental importance for the good clinical evolution of the reported case.

The colostomy for fecal diversion was crucial to prevent infection progression and necrosis in the case reported.This procedure is indicated in cases where there is progressive destruction of the anal sphincter mechanism due to the infectious process, when having rectal perforation or in cases where there is a very extensive wound[5].

CONCLUSION

Fournier gangrene is a serious infection that requires early diagnosis and adequate treatment, and it is very important to evaluate early the need for a protective colostomy due to the possibility of involvement of both the perineal and abdominal regions by the synergy of Fournier's gangrene.

After submitting the patient to the colostomy in a surgical procedure to protect the abdominal cavity from the disease progression, the eminent result was obtained with good clinical evolution, improvement of the infectious condition and discharge from hospital.

REFERENCES

1. Moreira DR, Gonçalves ALS, Aucelio RS, Silva KG. Terapêutica cirúrgica na síndrome de Fournier: relato de caso / Surgicaltherapy in Fourniersyndrome: case report. RevMed (São Paulo). 2017 abr.-jun.;96(2):116-20.
2. Abreu RAA, Filho JMM, Corrêa M, Figueira ALM, Speranzi MB. Síndrome de Fournier: Estudo de 32 pacientes - do diagnóstico à reconstrução; GED gastroenterol. endosc. dig. 2014: 33(2):45-51
3. Nascimento SCG, Rodrigues FSM, Malagutti W, Ferraz RRN. Assistência do enfermeiro referência em curativo ao portador da Síndrome de Fourier: Relato de Caso; Revista UNILUS Ensino e Pesquisa v. 15, n. 41, out./dez. 2018 ISSN 2318-2083 (eletrônico)
4. Singh A, Ahmed K, Aydin A, Khan MS, Dasgupta P. Fournier's gangrene. A clinical review. 2016.3.157.

5. Wong UR, Domínguez F. Indicaciones de colostomíaenla gangrena de Fournier. RevHospJuaMex 2004; 71(3):120-123.
6. Pittman DM, Smith LE. Complications of colostomy closure. Dis Colon Rectum 1985; 28: 836-43.
7. Knox AJ, Birkett FDH, Collins CD. Closure of colostomy. Br J Surg 1971;58:669-72.
8. Basoglu M, Gül O, Yildirgan I, Balik AA, Ozbey I, Oren D. Fournier's gangrene: review of fifteen cases. Am Surg. 1997;63(11):1019-21.
9. Mello LSD, Marranghello MM, Nasrala AFS , Henry P. Síndrome de Fournier. COORTE - Revista Científica do Hospital Santa Rosa. 2014; (4): 63-66.