Radiol Oncol 2005; 39(4): 249-52.

case report

The usefulness of transrectal endosonography in differentiating an anal abscess from a rectal carcinoma. A case report

Malgorzata Kolodziejczak[1], Iwona Sudol - Szopinska[2]

[1]*Proctology, Sub-Department of General Surgery, City Traumatic Hospital, Warsaw, Poland*
[2]*Central Institute for Labour Protection – National Research Institute, Warsaw and Department of Imaging Diagnostics, Second Faculty, Medical School, Warsaw, Poland*

Background. *The high anal abscess might have not a typical, chronic clinical course, and its diagnosis may be difficult.*
Case report. *The authors describe a case of a patient with the initial diagnosis of rectal cancer. Because of non-specific clinical symptoms suggesting a high anal abscess with atypical, chronic course of the disease, additional investigations were suggested. The final diagnosis was high, submucous-intersphincteric abscess.*
Conclusions. *In the described case the most important ones turned out to be an exact finger per rectum examination, clinical proctologic assessment, and the transrectal ultrasound.*

Key words: anus diseases; abscess; rectal neoplasms; endosonography; diagnosis, differential

Introduction

The high anal abscess might have not a typical, chronic clinical course, and its diagnosis may be difficult. In the diagnostics of anal abscesses one of the most crucial things is early diagnosis, followed by its incision, without waiting for evident clinical symptoms. The longer the process last the greater is the risk of creation of the complex fistula. The treatment for such a fistula carries the risk of anal sphincters trauma. Another important thing is an exact definition of the type of anal abscess in order to plan the surgical approach.[1,2]

Received 31 August 2005
Accepted 15 September 2005

Correspondence to: Assist. Prof. Iwona Sudol-Szopinska, MD, PhD, CIOP-PIB, ul. Czerniakowska 16, 00-701 Warsaw, Poland; Fax +48 2232 65991; E-mail: iwsud@ciop.pl

Case report

Half a year ago, a 46-year old woman was hospitalized at the Neurosurgical Department due to the dystaesthesia and numbness sensation in the lower limbs. The contrast examination led to the suspicion of a tumour in the right curvature of the colon. Colonoscopy did not, however, confirmed that diagnosis and it did not find any pathology.

A few months ago she was again admitted to the hospital, to the Oncological Department by her gynaecologist who on palpation confirmed the presence of a rectal mass. The contrast examination and colonoscopy were

repeated and have again not found any signs of rectal carcinoma.

Because she also had discrete symptoms of periodical discharge of puss from the anus, feeling of pressure against the walls of the anal canal, without neither pain nor fever, she was admitted to the Proctologic Department with the suspicion of a high abscess of the anal canal. The general examination of the patient did not show any abnormalities.

During a proctologic assessment, a hard mass covered by mobile mucous was palpated, about 3 cm from the anal verge, on the right side of the rectum. The lower margin of the mass was reaching level of the dentate line. Little discomfort was felt by the patient during palpation.

In the place corresponding to the painful area rectoscopy showed a bulg of mucosa, but the mucosa itself looked normal. No other abnormalities were found. Rectoscopy did not show any lesion within 10 cm of the colon, and a normal mucosa was seen covering all walls of the colon.

Biopsy specimens were taken from the painful and palpated lesion. The histopatological assessment confirmed the presence of normal fragments of the mucous membrane of the colon with small infiltrations of lymphocytes into the mucosa and submucosa.

Fiberosigmoidoscopy was performed next and the rectum and distal sigmoid colon were assessed. Bulbing of the rectal wall was again seen 5-6 cm from the anal verge, covered by swollen and congested mucous membrane. Biopsy specimens were taken. During the examination a leakage of puss content from the outlet was visualized 3 cm above sphincters. No other changes within the colon were found.

Computer tomography (layers 10 mm thick) confirmed the presence of a tumour localized just above the anal sphincters. Images were, however, not conclusive.

Transrectal ultrasound (TRUS) was performed on the BK Medical unit 3535 with 7 MHz endorectal mechanical probe. It showed the submucosal-intersphincteric abscess with diameters reaching 41x17x25 mm on the anterior-right anal wall 5-6 cm from anal verge (Figure 1a).

From its distal part a channel of an anal fistula crossing the internal anal sphincter at the level of puborectal muscle was originating. The internal fistulous opening was located between high and middle parts of the anal canal, on the right wall (Figure 1b). The ima-

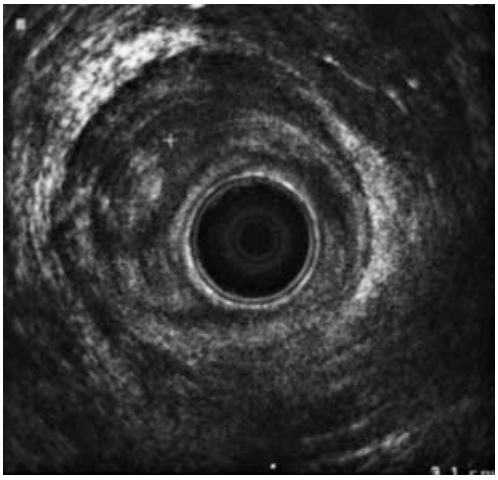

Figure 1a. Submucosal component of the abscess located on the right wall of the rectum, above the anal sphincters (crosses).

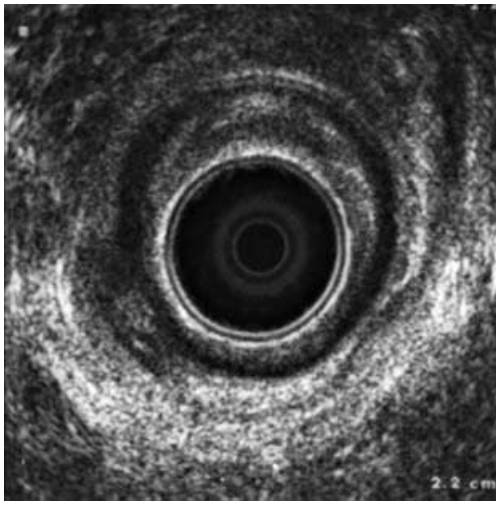

Figure 1b. Intersphincteric part with an anal fistula on the right wall.

ge was typical for high submucosal-intersphincteric abscess and fistula, and there were no suspected signs of rectal cancer.

The patient was classified for a surgical intervention. During surgery the submucosal compartment of the abscess was opened and its intersphincteric part was then visible. The incision was prolonged in the direction of the anal verge and the intersphincteric space was opened. Open wound was left to healing. The solid, hard fragments of circumferential tissues were taken to the histopathologic investigation.

The result of histopathologic investigation was following: fragments of mucous membrane of large intestine with signs of unspecific inflammation.

The postsurgical period was not complicated. The patient was sent home the third day after the operation.

Discussion

The presented case exemplifies a rare case of high abscess of anal canal about chronic, many months' course. The chronic inflammatory state caused the swelling and the induration of the circumferential tissues which were responsible for diagnostic difficulties to differentiate it from neoplastic tumour. The abscess of anus is in majority of the cases a disease about sharp course with main symptoms such as pain and temperature. In the presented case the clinical presentation was not, however, characteristic because the abscess was located above the dentate line. In this area there are no nerves responsible for pain sensation so the patient did not complain on pain, and only on periodical feeling of »dilating« in rectum.[3] The lack of other typical symptoms like fluctuation and redness of the perianal skin were other reasons which made the diagnosis more difficult. Although it should also be bear in mind that patients with Crohn's diseases have asymptomatic abscesses in 62% of the cases,[4] this patient did not, however, suffer from non-specific inflammatory bowel disease.

In many cases an anal fistula is the first symptom of an anal abscess. According to Choen *et al*[5] and Deen *et al*[6] these two diseases coexist in 50% and 45% of the patients, respectively. At the time of surgery for the anal abscess such a fistula remains unrecognized in the clinical examination in 18-95% of the cases, which leads to the recurrence of the abscess or fistula in 48-62% of the cases.[7]

The presence of discharge from anus might have helped here because it is often the first symptom of an intersphincteric abscess, but only under the condition that it spontaneously pierces through the anal crypt. In the presented case only occasionally the abscess emptied itself to the anal crypt, which was noted by the patient as the periodical leakage of pus from the anus, but it has never been accompanied by a high fever.

Anoscopy revealed an internal opening with puss sipping from it. TRUS is currently the most commonly used for the diagnostics of the anal canal diseases.[8-10] However, in the presented case, the detailed history of the disease and the exact proctologic assessment pointed to the inflammatory disease, atypical symptoms suggested initially a rectal cancer. TRUS immediately and easily helped with the differentiation of these two diseases, saving time and costs of further diagnostics. It also showed an excellent agreement with surgery in regard to defining anatomy of abscess and anal fistula, and helped planning the surgical approach. Simple drainage of the diagnosed abscess would be mostly insufficient and that is why the surgeons, relying on TRUS, broadened the cryptal outlet.

Conclusions

Transrectal ultrasound is an useful examination enabling the differentiation of rectal carcinoma from an abscess of the anal canal.

Aknowledgement

The authors thank Professor Anna K. Panorska, for help in drafting of this paper.

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