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INTESTINAL OBSTRUCTION DUE TO A COLONIC LIPOMA**STRESZCZENIE**

Wstęp

Tłuszczaki są rzadkimi łagodnymi guzami jelita grubego, najczęściej bezobjawowymi, przypadkowo stwierdzanymi podczas kolonoskopii. Większe zmiany mogą powodować niespecyficzny nawracający ból brzucha, objawy niedrożności jelit, krwawienia z dolnego odcinka przewodu pokarmowego. Autorzy opisują dwa przypadki dużych tłuszczaków jelita grubego.

Opis przypadku

Autorzy opisują dwa przypadki dużych tłuszczaków jelita grubego. Trudności w przedoperacyjnym zróznicowaniu między łagodnym a złośliwym charakterem zmian spowodowały, że w obu przypadkach wykonano wycięcie prawej połowy jelita grubego.

51-letnia kobieta z guzowatą masą w okrężnicy poprzecznej, stwierdzaną w badaniu TK jamy brzusznej. Śródoperacyjnie stwierdzono w niej wgłobienie wstępnicy do poprzecznicy, spowodowane 6 cm tłuszczakiem zlokalizowanym nieco powyżej zastawki krętniczno-kątniczej.

64-letnia kobieta diagnozowana z powodu objawów krwawienia z dolnego odcinka przewodu pokarmowego. W trakcie kolonoskopii stwierdzono polipowatą zmianę wpuklającą się do światła kątnicy. Wynik badania hist.-pat. – fragment śluzówki jelita grubego lub polip, najprawdopodobniej hiperplastyczny, nie stwierdzono utkania guza. Trzy miesiące później, wykonana przed planową cholecystectomią, kontrolna kolonoskopia wykazała znaczący wzrost polipa kątnicy obejmującego zastawkę krętniczno-kątniczą i zajmującego 1/3 obwodu jelita. Pacjentce wycięto prawą połowę okrężnicy, histopatologicznie stwierdzono podśluzówkowy tłuszczak jelita grubego.

Wnioski

Chociaż objawowe tłuszczaki zdarzają się rzadko, aby je rozpoznać, trzeba pamiętać o takiej możliwości.

Słowa kluczowe: tłuszczak jelita grubego, wgłobienie jelita grubego.

SUMMARY

Background

Lipomas are rare, benign tumors of the colon; they are mostly asymptomatic, often detected incidentally at colonoscopy. Larger lesions may produce nonspecific recurrent abdominal pain, intestinal obstruction, rectal bleeding. The authors describe two cases of large colonic lipomas.

Case Report

The authors describe two cases of large colonic lipomas. Difficulties in the preoperative differentiation between benign and malignant colonic tumours result in right hemicolectomy performed in both cases. A 51 year old woman with tumourous mass in the transverse colon showed in abdominal CT image. Intraoperatively she was found to have an intussusception of the ascending colon into the transverse colon caused by 6 cm in diameter lipoma located slightly above the ileocaecal valve (ICV).

A 64 year old woman, diagnosed due to symptoms of bleeding from the low segment of digestive tract, during colonoscopy was found to have a tumourous mass protruding into the lumen of the caecum. Histological examination – mucous samples of the colon or the polyp, likely to be hyperplastic, no tumor texture was found. Three months later prior to planned cholecystectomy colonoscopy inspection of the caecal lesion showed a significant growth of a polyp encircling and spreading beyond ICV to the extent of over one third of the intestine lumen. The patient was subjected to right hemicolectomy, the pathologist identified submucosum lipoma of the colon.

Conclusions

Although symptomatic lipomas are rare, they should be remembered for diagnostic purposes.

Key words: lipoma of the colon, colonic intussusception.

INTRODUCTION

The most common benign colonic tumours are adenomas whereas the second to come in the incidence rate are lipomas. The latter develop under the mucous membrane, most frequently as individual neoplasms of 1 to 3 cm in diameter. Slow and insidious development at the onset facilitates with the course of time their growth into conspicuous sizes. Lipomas are diagnosed in 4% of colonoscopy examinations [1]. Neoplasms of 2 cm max. in diameter can be endoscopically excised without any follow-up supervision [1-3]. As the lipoma is growing, apparent become complaints due to the intestinal passage disturbances induced by the intraluminal spread of the tumour as well as intestinal occlusion or bleeding from the superficial mucosal ulceration of the lipoma able to mimic a malignant lesion in the colon [4-6]. The neoplasms may also necrose showing symptoms similar to acute appendicitis [7]. Large lipomas with first symptoms identified as parallel complications are extremely rare, and it is difficult to make an accurate preoperative diagnosis, as the authors described in their cases.

CASE DESCRIPTION

1. Female patient aged 51 was admitted to surgery ward for a planned operation due to tumour of the transverse colon. The patient reported in the anamnesis that she had suffered from an epigastric pain and diarrhoea two months before. The same complaints would recur in the following few weeks. An abdominal ultrasonography (USG) dated Sept. 28, 2001 showed the presence of a thick-walled (15 mm), oval structure,

most probably a fragment of the gastrointestinal tract (stomach?, transverse colon?) in the central part of the epigastrium; the rest of abdominal organs remained normal. A panendoscopy showed no lesions in the oesophagus, stomach, and duodenum.

A colonoscopy dated Oct. 10, 2001 showed no pathological lesions either in the anus or in the colon up to 110 cm of its length; one week later, an abdominal computed tomography (CT) showed tumourous mass in the transverse colon image. Within the former 3 weeks, the patient lost 8 kg of weight. On admission (Oct. 22, 2001) she reported an epigastric pain, diarrhoea, small amounts of flatus. Physical findings showed: soft abdomen with a minor epigastric pain; a palpable mild-edged resistance spotted slightly to the right of the median line; negative peritoneal symptoms, a lazy peristalsis. A laboratory examination showed Hb 10.3g%, Ht 29.8%, Er 4.1M/uL, lowered concentration of protein (4.2g/l) and of albumin (3.0g/l) in the blood serum, CEA and CA 19-9: 0.00. The patient was subjected to surgery in Oct. 24, 2001: she was found intraoperatively to have a large tumour in the mid-transverse colon diagnosed as intussusception of the ascending colon into the transverse colon. The intussusception was partially fixed by pushing the telescoping part of the intestine back into place and on examination of the surrounding lymph nodes, liver, stomach, remaining bowel segments, the right side of the colon was resected. Side-to-side isoperistalsic ileotransverse anastomosis was performed with GIA-90 and TA-55 staplers. Dissection of excised intestinal fragment revealed an ulcerated tumour located slightly above the ileocaecal valve (ICV), the size of 6 cm in diameter, on macroscopic section being a probable lipoma.

Result of histopathological examination: lipoma submucosum pendulum magnum coeci cum ulceratione mucosae supra tumorem et necrosi partialis. (dr med. sci. A. Urbaniak). No complications were recorded in the postoperative course.

2. Female patient aged 64, obese, treated due to arterial hypertension and stable coronary disease, admitted to surgery ward for a colonoscopy due to symptoms of bleeding from the low segment of gastrointestinal tract. The patient reported further in the anamnesis that she had a disturbed stool frequency, persistent flatulence, hypogastric obstructions. The colonoscopy was performed: the colon was inspected all along its length; ICV remained unrevealed due to the large overlying tumourous mass protruding into the lumen of the caecum with no mucous lesions observable – sampling was performed for histopathological examination; furthermore, the sigmoid colon showed individual diverticula and a large pedicled polyp of 3 cm in diameter with a rough, easily bleeding surface. The patient refused proposed polypectomy, sampling was performed; histopathological examination: adenoma tubulovillosum polyposum in fragmentis cum adenodysplasia gradus minoris (dr med. sci. A. Urbaniak).

In January 2003, the patient was subjected to endoscopic polypectomy of the sigmoid polyp; histopathological examination: adenoma tubulare cum dysplasia medio-cris et focale maioris gradus; excisio completa (dr med. sci. A. Urbaniak). Due to recurrent abdominal pain, the diagnostic procedure was supplemented by abdominal USG and endoscopy in the upper segment of digestive tract: cholelithiasis was iden-

tified; images of the oesophagus, stomach and duodenum were found to be normal. No abnormalities were detected in the laboratory examinations. The patient refused proposed laparoscopic cholecystectomy.

In April 2003, the patient was again admitted to surgery ward for laparoscopic cholecystectomy and additional inspection of the caecal lesion. Prior to a planned operation, a colonoscopy was performed showing significant growth of a polyp in the caecum – nearby the appendix outlet was located a large sessile polyp encircling and spreading beyond ICV to the extent of over one third of the intestine perimeter. Histopathological examination: minor superficial mucous samples of the colon or the polyp, likely to be hyperplastic with scant, active (++) , nonspecific inflammatory infiltration and a minor stromal oedema; no tumour texture was found in the samples examined (dr med. sci. A. Urbaniak).

Due to the whole clinical picture and diagnostic difficulties as to the pathomorphological quality of the caecal lesion, the patient was offered and subjected to right hemicolectomy with a parallel cholecystectomy.

In the patient was intraoperatively found a caecal tumour of 10 cm in diameter growing intramurally; no lesions were revealed on the mucosa overlying the tumour. No swollen lymph nodes of the intestinal mesentery were detected. The postoperative course was complicated after 7 days by a minor suppuration of the postsurgical wound. From the inoculation was grown *Enterococcus faecalis* sensitive to: ampicillin, gentamicin, tetracycline, vancomycin, teicoplanin. No antibiotics were administered as the inflammatory process of the wound was easily controlled by hydrogen peroxide solution and betadine wash respectively as well as effective drainage.

Result of histopathological examination: lipoma submucosum intestini crassi cum ecchymosibus haemorrhagicis recentibus (dr med. sci. A. Urbaniak).

DISCUSSION

Lipomas are benign tumours of mesenchymal origin. They may be located on the whole length of digestive tract but the highest percentage of 60-65% is observed in the colon; 20-25% in the small intestine, and the remaining 10-15% in the oesophagus and stomach [1, 3]. Exceptionally seldom do lipomas change into malignancy, they come from the fat cells in the submucosa and develop intramurally: submucously in 90%, and subserously in 10% [1, 2, 4-6, 8, 9]. They may occur as individual or multiple lesions (from 10 to 24%) [1]. Colonic lipomas are equally common in females and males. They are mainly located in the caecum and the right side of the colon, none is observed in the rectum. Lipomas are located more frequently in the right part of the colon in females, whereas in males in its left part [1, 3, 4, 8, 9]. Macroscopically, lipomas resemble polyps overlaid with normal mucosa. Microscopically, they are composed of mature adipose tissue without atrophy, and contain a slight amount of scirrhous elements forming the stroma of the tumour. Lipomas vary in diameter from

5 mm to 9 cm. In the early stage, lipomas are clinically asymptomatic whereas in the subsequent stage diverse noncharacteristic complaints resulting from two basic lipomic complications are observed: obstruction due to the mass extending intraluminaly into the intestine and bleeding from the mucosa overlying the lesion. Patients report intermittent abdominal pains with flatulence, nausea, diarrhoea or constipation. In 35-65% of lipomas symptoms of subobstruction are typically observed [1] likely to result from, as the authors described in their cases, from large sizes of the tumour or chronic intussusception of the intestine dragged by the smaller pedicled lesion. Lipomas are after polyps the second cause of intussusception in adults. Intussusception symptoms attributable to children i.e. palpable tumourous abdominal mass and blood in the per rectum examination are not common in adults. The disease course is mostly subacute or chronic, periodical intestinal intussusception is associated with crampy abdominal pains [1, 3, 10, 11]. Bleeding is symptomatic of ca. 30% of lipomas resulting from necrosis and ulceration of the mucosa overlying the tumour [1, 4, 6]. Bleeding from the digestive tract suggests performing a colonoscopy – a primary examination in colonic pathology allowing sampling and an accurate diagnosis. A superficial biopsy specimen does not contribute to right diagnosis. Sometimes, on the mucosa are observed ulcerated-necrotic lesions with white-yellow adipose tissue in the bottom; English medical literature defines it as ‘naked fat sign’ and indicates that the tumour may be a lipoma. The term ‘pillow sign’ illustrates another feature of the lipoma denoting that it is circular, soft and changes its shape when pressed [1]. An abdominal picture is useless in uncomplicated lipomas, but it is of little use in intussusception diagnostic procedure. The double-contrast method shows no pathognomonic symptoms for the lipoma of which transparency being higher than the surrounding tissues may be the cause, but it is also due to the angle established by the submucosal tumour against the wall of the intestine adjacent to the lipoma (it is nearly a right angle); smooth outline of the surface, mucosal folds approaching the tumour and vanishing at its borderline [5, 8]. An abdominal CT sensitive to tissue density in the tumour differentiation, is considered to be able to detect even minor lesions. Prognosis in patients with lipomas is very favourable if the diagnosis is made before complications can occur. However, the majority of such diagnoses are made incidentally at colonoscopy or laparotomy during a diagnostic workup for other medical problems. Tumours of 2 cm max. in size can be, in safety, endoscopically excised, larger ones may be enucleated after intestinal wall incision both in classic and laparoscopic operation [1-3, 5, 12, 13]. In such cases as those presented by the authors in which no preoperative histopathological diagnosis is made and surgery is advised due to obstruction, intussusception or suspected malignancy, surgical procedure is usually more radical [4-6, 8]. A colonoscopy turned out to be insufficient to make a preoperative diagnosis. In one case, biopsy specimens were taken too superficially, and in the other, the endoscopist, being probably concerned with the transverse colon tumour reported in USG, overlooked the ascending colon lipoma – this very same lipoma would in two weeks’ time cause intussusception. Moreover, by insufflating air into the intestinal

lumen, the operator must have pushed the intussusception temporarily back into place. Likewise, a CT examination considered to be sensitive and precise was only to prove the correlation between the tumorous mass and the colon.

CONCLUSION

Although symptomatic lipomas are rare, they should be remembered for diagnostic purposes.

Surgery was prescribed in both presented cases due to an ambiguous clinical picture and suspected colonic malignancy.

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