Case study

METASTATIC SIGMOID COLON CANCER PRESENTED AS INCARCERATED INGUINAL HERNIA – CASE REPORT

ABSTRACT

Inguinal hernia containing intestinal adenocarcinoma metastasis is a rare finding. Sigmoid carcinoma is most commonly found. Older males are more often affected. 84-years old malepatient presented with pain in the right groin, considered to be incarcerated right inguinal hernia. During operation small intestine mesentery metastases were found inside the hernia sac. Histopathological verification has shown adenocarcinoma metastasis of intestinal type. Additional diagnostics has shown sigmoid carcinoma. Primary tumor was locally advanced and unresectable, groin hernia was repaired using Bassini technique and diverting colostomy was performed. Due to peritoneal carcinosis, symptomatic treatment was advised.

In patients presenting with groin hernia, when malignant lesion is present within hernia sac, histopathologic verification of the lesion is needed. Further diagnostic modalities are also indicated for verification of primary tumor.

KEYWORDS: right inguinal hernia, male, intestinal carcinoma metastases, colon cancer.

INTRODUCTION

Malignant lesion inside inguinal hernia sacis a rare finding [1]. Colorectal carcinoma is localized within inguinal hernia sac in less than 1/200 cases [2]. Patients are usually asymptomatic (2). Data suggests that it occurs almost exclusively in elderly

male, originates from sigmoid colon and is incarcerated in the left groin [1, 2]. The first case of tumor inside inguinal hernia sac was reported in 1749 [3].

The following case report presents a case of right inguinal hernia containing metastases of a welldifferentiatedadenocarcinomaofintestinaltype.

CASE REPORT

84-years old male Caucasian presented at our emergency department (ED) with pain due to right inguinal hernia. He had pain for longer time which intensified two days prior to theexamination. He reported nausea without vomiting. In the past, he had been hospitalised at our department due to acute cholecystitis, which was treated conservatively. During that hospitalisation right inguinal hernia had enlarged and he had been operated on due to abscessus in the right inguinal area.

On clinical examination nonreducible right inguinoscrotal hernia was found. The lower abdominal quadrants were painful on palpation. Abdominal x-rays has shown signs of intestinal obstruction. Patient was admitted on ward.

On the day of admission scrotal ultrasound (US) was done. It showed aperistaltic, edematous and poorly vascularised segment of intestine. Bilateral hydrocele was described. Right testicle was hyperemic,parenchima was homogenous without focal lesions. Left testicle was normal. Microcalcinations were described in the both epidimae.

On the 1st day of hospitalisation patient was operated. Parainguinal incision was made. Inside hernia sac small intestine was found. It was vital, without signs of obstruction. In the small intestine mesentery neoplastic lesions were found, resected and sent for histological verification which has shown well differentiated

adenocarcinoma of the intestine - mesenteric carcinosis(Figure 1).Hernioplastyoftheright inguinal hernia was madeusinBassini technique.

During hospitalisation colonoscopy was done. At 15 cm proximally from anocutaneous line tumor was found. Samples were taken and sent for patohistologic verification.

Irigography was also done, which has shown obstruction 13 cm proximally from anocutaneous line.

During hospitalisation abdominal CT with contrast was done. It has shown heterogenous tumor formation, measuring 12x7.5 cm, that protruded into minor pelvis and anteriorly compressed the urethra. Mesenterial adipose tissue was infiltrated, in the right segments two bigger formations were described. Enlarged intraabdominal lymph nodes were described, up to 1.2 cm. Colon was elongated, filled with intestinal content, without signs of intestinal obstruction.

Patient was operated on at 21st day of hospitalisation. Middle median laparotomy was made. During exploration tumor in the upper third of the rectum and lower sigmoid colon was palpable. Liver was palpated and formations suspicious for metastases were found. Inside right inguinal canal hernia was found, hernia neck was sutured. Sigmostomy was made and fixed on the abdominal wall.

Histological examination has shown well differentiated adenocarcinoma of intestinal type with carcinosis of peritoneum.

Patient was presented to oncological mulitidisciplinary team - symptomatic treatment was advised.

DISCUSSION

Malignant neoplasm is found in less than 0.5 % of all inguinal hernias [1]. Hernia sac tumors are classified into three groups regarding the relationship of the tumor to the hernia sac [3]. Intrasaccular tumors include primary tumors of organs incarcerated in hernia (e.g. bladder cancer, colon cancer, appendix cancer, metastatic neoplasms involving omentum) [1, 3]. Saccular tumors are primary or secondary malignant lesions that involve peritoneum (e.g. primary mesothelioma, peritoneal metastases from prostate, ovary, colon, pancreas) [1, 3]. Extrasaccular malignant lesion is any tumor protruding through hernia defect but outside the hernia sac (e.g. metastatic inguinal lymph node) [3].

Inguinal hernia sac containing malignant lesion is usually asymptomatic [3]. There are some hypotheses that a longstanding hernia that becomes acutely incarcerated has a higher likelihood of containing tumor [3]. Some authors believe that any nonreducibleinguinal mass that lacks a tactile impulse should rise suspicion of cancer [3]. A prospective study has shown no association between inguinal hernia and colorectal cancer [4,5]. Symptoms such as abdominal pain and weight loss should arise suspicion of cancer [3]. Data from the literature suggests that about fifth of all male patients with colorectal cancer have concurrent inguinal hernia or have had a repair of inguinal hernia 1-2 years prior to cancer diagnosis [4,6]. Every malignant lesion found within hernia sac should be examined histologically [3].

There are no clear guidelines which surgical approach is the best [1, 4]. It usually depends on local anatomy, surgical findings and surgeons' experience [1, 4,7]. In

most reported cases colonic resection at laparatomy is followed by conventional inguinal hernia repair through separate incision [1].

CONCLUSION

Inguinal hernia sac containing colon cancer metastasis is rare finding. In such patients additional diagnostic evaluation is indicated to verify the origin and stage of disease. Surgical approach depends mostly on patients' habitus and surgeons' experience and preferences.

CONSENT

As perinternational standard ofuniversity standard writtenpatientconsenthasbeencollectedandpreservedbytheauthor(s).

ETHICAL APPROVAL

It is not aplicable.

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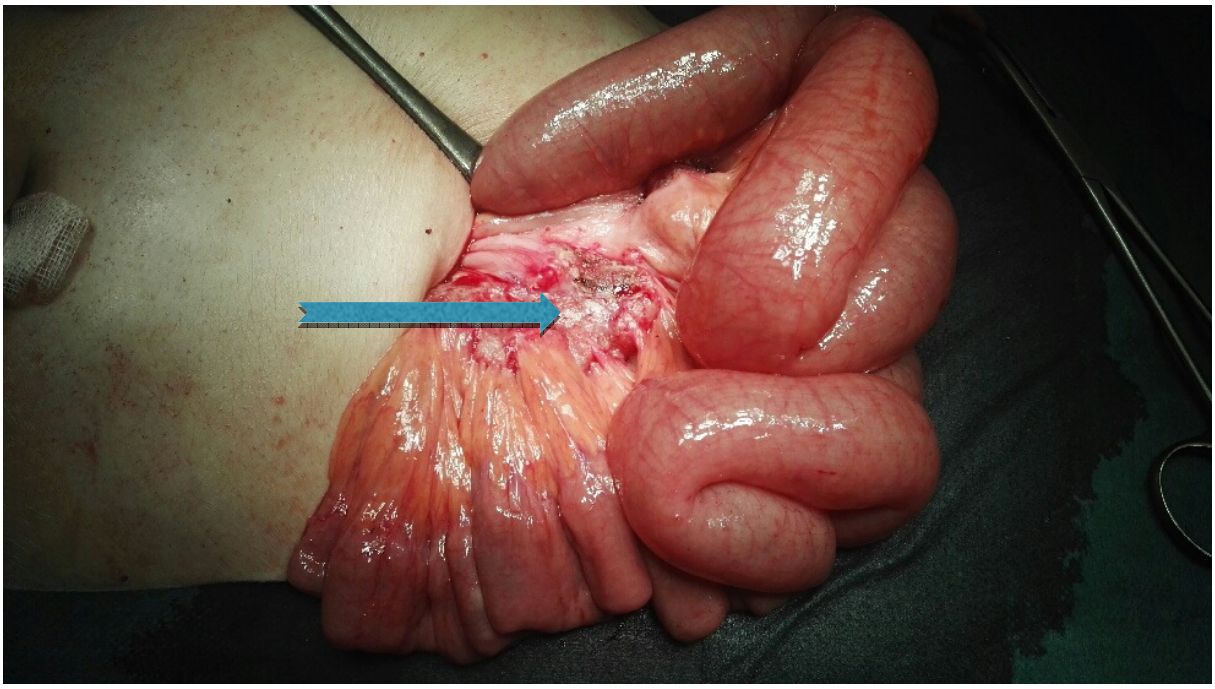
FIGURES

Figure 1: Smallintestinewithlargemetastaticlesion in themesentery (arrow).



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