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Medicine

AN INTERESTING CASE OF SYNCHRONOUS COLONIC TUMORS

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ABSTRACT:
WE PRESENT A CASE OF A 62 YEARS OLD MAN, WHO WAS ADMITTED RECENTLY IN OUR SURGICAL CLINIC. HE WAS OPERATED LAPAROSCOPICALLY, APPROXIMATELY 7 MONTHS BEFORE, FOR AN ACUTE CALCULOUS CHOLECYSTITIS.
HE PRESENTED AT EMERGENCY ROOM FOR PERSISTENT RIGHT FLANK ABDOMINAL PAIN AND A PALPABLE MASS AT THE SAME LEVEL.
COLONOSCOPY CONFIRMED THE ABDOMINAL ULTRASOUND SUPPOSITION: A BIG TUMOR OF ASCENDING COLON AND, SURPRISINGLY, ALSO A SMALL TUMOR OF SIGMOID COLON.
THE PATIENT WAS OPERATED THROUGH AN OPEN PROCEDURE AND THE POSTOPERATIVE OUTCOME WAS VERY GOOD.
THE PARTICULARITY OF THIS CASE IS COEXISTENCE OF ASYMPTOMATIC SYNCHRONOUS COLONIC TUMORS AND ACUTE CALCULOUS CHOLECISTITIS AT THE TIME OF THE FIRST INTERVENTION (CHOLECYSTECTOMY).

KEY WORDS: SYNCHRONOUS COLONIC TUMORS, ACUTE CALCULOUS CHOLECYSTITIS

INTRODUCTION

Synchronous colorectal carcinomas (CRC) occur in 1-8% of patients diagnosed with CRC. The incidence of synchronous colonic tumors in some populations is 5% among the patients with primary colonic cancer. Syncronous colic tumors were associated with decreased survival rates and poorer prognosis compared to solitary tumors. These results emphasize the importance of diagnosing synchronous tumors, preferably before surgery, to provide optimal decisions and surgical planning[11].

The association of rectosigmoid polyps with polyps located on the proximal colon is a subject of debate and the need for entire large bowel colonoscopy in patients with left colon polyps diagnosed by sigmoidoscopy remains controversial. Kim et al., on a group of 535 patients with rectosigmoid polyps, found 33.4% of them concomitantly with polyps localized in the proximal colon, most of them of adenomatous type. The authors recommend complete colonoscopic examination of all patients with adenomatous rectosigmoid polyps[12].

MAIN TEXT

A 62-year-old-man visited our emergency department with chronic abdominal pain in right flank for 2 weeks, and some blood traces in stool. After initial evaluation, abdominal ultrasound was performed, which revealed diffuse wall thickening of the right ascending colon. On physical examination, we could find pale skin and a palpable mass in the right flank, which seemed to be of colonic origin.

[11] Bos ACRK, Matthijsen RA, van Erning FN, van Oijen MGH, Rutten HJT, Lemmens VEPP. *Treatment and Outcome of Synchronous Colorectal Carcinomas: A Nationwide Study*. Ann Surg Oncol. 2018 Feb;25(2):414-421. doi: 10.1245/s10434-017-6255-y

[12] Kim WH, Lee SK, Chung JH, Cho YS, Yoo HM, Kang JK. *Significance of rectosigmoid polyp as a predictor of proximal colonic polyp*. Yonsei Med J, 41:98-106, 2000

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Blood tests showed an elevated white blood count (13.5/cL) and a moderate anemia (a value of hemoglobin of 11.2 g/dL.

We performed a colonoscopy that found a lesion at 30 cm from anal orifice, described as a sesile hemorrhagic polyp of 2,5 cm diameter, of vegetant type, that could not be excised colonoscopically (very high risk of iatrogenic perforation of the colon), and only some biopic fragments were taken. It was not tattooed. Panisch recommends that any symptomatic polyps should be suspected of malignancy[13].

Continuing the colonoscopic examination, we could find a big circumferential ascending colon tumor, of vegetant type, suprainfected, approximately at 130 cm from the anal verge.

We proposed a surgical intervention through an open laparotomy for the patient, which he accepted. Intraoperative, we rapidly found the big ascending colon tumor, and some adherences from the previous cholecystectomy. There were several quite tight adherences between small bowel loops, determined by a foreign materials that looked like small residuals from gallstones. At the time of cholecystectomy we had an incidence consisting of extracting bag rupture. A thorough adhesiolysis was performed. As we previously published, it is obvious the role of foreign materials in determining adherencial syndromes[14].

The small transformed polyp of the sigmoid colon was very difficult to find by palpating the colonic wall, in spite of a good preoperative colon preparation. Thus we sustain the crucial role of tattooing at colonoscopy for small tumors (Figure 1).

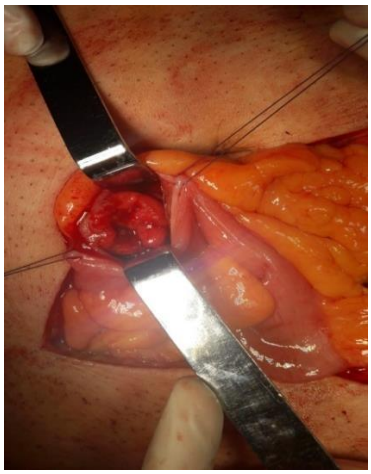

Figure 1. Intraoperative finding of a transformed sigmoidian polyp

[13] Bick, Benjamin L., Ponugoti, Prasanna L., Rex, Douglas K.; *High yield of synchronous lesions in referred patients with large lateral spreading colorectal tumors.* Gastrointest Endosc. 2017 Jan;85(1):228-233. doi: 10.1016/j.gie.2016.06.035

[14] Bobic, Simona, Constantin, Vlad D., Albu Kaya, Mădălina, Marin, Ştefania, Dănilă, Elena, Dimitriu, Mihai, Socea, Bogdan. *Postoperative peritoneal adhesions prophylaxy using collagen-based biomaterials.* Proceedings of the 7th International Conference on Advanced Materials and Systems (ICAMS 2018), p. 45-50; Bobic, Simona, Constantin, Vlad D., Budu Vlad A., Socea, Bogdan, Popescu, Gheorghe H., Nica, Elvira. *Proactive therapeutical modulation of the postoperative intraperitoneal adhesions- the efficacy of the collagen-based biomaterials (simple and composite).* Unified Journal Of Medicine And Medical Sciences, 2016, 2(1): 001-009; Bobic, Simona, Popa, Florian, Socea, Bogdan, Carâp, Alexandru C., Davițoiu, Dragoș V., Constantin, Vlad D. *Blunt abdominal trauma and peritoneal adhesions.* Research and Science Today. 2018, 1(15): 119-31

We performed a right ileo-hemicolectomy, followed by a latero-lateral mechanical ileo-transverso-anasthomosis and a segmental sigmoidectomy involving the sigmoid polyp.

On the transverse colon, at the anasthomotic edge, we also found a small pediculous polyp which was electrically resected. It was a proof that synchronous colonic tumors appeared by polyp malignant transformation. We recommended the patient a new control colonoscopy after 3 months and then, at least one yearly for the remnant large bowel.

There is a very high prevalence of synchronous lesions, including other large and advanced synchronous lesions, in patients with flat or sessile conventional adenomas and serrated colorectal polyps[15]. Patients with large sesile polyps in the proximal colon need detailed examination of the rest of the colon.

The posoperative macroscopic specimen can be seen in figure 2, after disection.

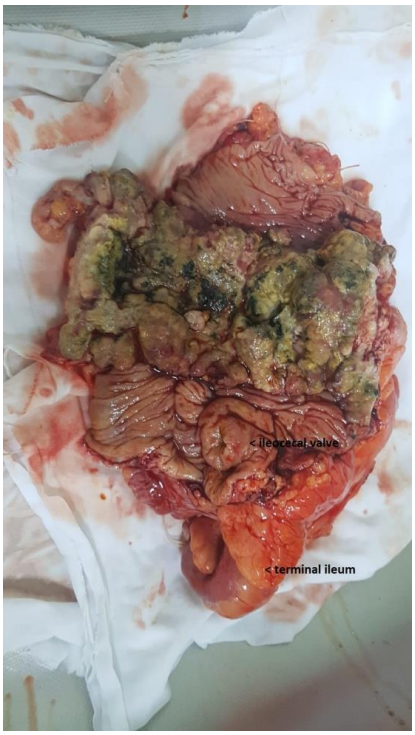

Figure 2. Postoperative right hemicolectomy specimen showing the circumferential tumor, terminal ileum and ileo-cecal valve

The postoperative evolution was very good. We suppressed the drain tubes in days 4 (subhepatic) and 5 (Douglas), with patient's discharge in day 7.

The only identified risk factors are a familial history of colorectal cancer (mother) and alcohol consumption. Data from literature suggests that alcohol consumption, particularly more than 28 grams/day of ethanol (~2 standard drinks of alcohol in the US), is associated with increased

[15] Panisch, Joel F. *Management of patients with polypoid lesions of the colon. Current concept and cotroversies.* Am J Gastroenterol, 71:3:315-24, 1979

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colorectal cancer risk for mismatch repair gene mutation carriers, meaning patients with family positive history[16].

Another problem raised by this case was that of an unrecognizable tumor colon at a patient with acute cholecystitis, because it is easily to assume that at least the right colon tumor existed at the time of cholecistecomy, as well. The factors of initial non-diagnosing were the lack of specific symptomatology, normal blood test results (except a high white blood count, which was interpreted in the acute state context), and the laparoscopic intervention. We retrospectively study the laparoscopic video. Visual abdominal inspection of the abdominal cavity could not find any abnormal aspect at that time, that could suggest further investigations. The lack of manual palpation feature is a well known deficiency of laparoscopic surgical procedures[17].

The sigmoid tumor could be at the origin of a mechanical occlusion per se or by sigmoid intussusception[18], but in this case, the complication was atypical, tumor hemorrhage. This is a more frequent complication of right colon tumors. In our case, the ascending colon tumor, having big dimensions, in the first moments of the operation seemed to be invading the right kidney or the retroperitoneal space. We had to differentiate it from a primary retroperitoneal mass[19].

CONCLUSION

Synchronous colic tumors is not a rare condition, especially for patients known with colonic polyps and familial history.

The best diagnostic method remains colonoscopy, which should be done whenever there are suggestive symptoms or findings. Colonoscopy should explore the entire colon, even under general anesthesia, if required.

[16] Dashti, S Ghazaleh et al. *Alcohol Consumption and the Risk of Colorectal Cancer for Mismatch Repair Gene Mutation Carriers.* Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology, vol. 26, 3 (2016): 366-375

[17] Lorenzon, Laura et al. *Evidence based medicine and surgical approaches for colon cancer: evidences, benefits and limitations of the laparoscopic vs open resection.* World journal of gastroenterology vol. 20, 13 (2014): 3680-92

[18] Socea B, Nica A, Bratu O, Diaconu C, Smaranda A, Socea L, Bertesteanu S, Dimitriu M, Carap A, Constantin V. *Incidental finding of a sigmoid intussusception associated with rectal prolapse-a case report.* Arch Balk Med Union, 2018, 53(1): 143-146

[19] Ionela Mihaela Vladu, Bogdan Socea, Vlad Baleanu et al. The utility of visceral index in prediction of metabolic syndrome and hypercholeserolemia. Revista de Chimie. 2018; 69(11): 3112-3114; Constantinoiu S, Bârlă R, Iosif C, Cociu L, Gîndea C, Hoară P, Bratu O, Ruşitoru L. *Difficulties in diagnosis and surgical treatment of a giant retroperitoneal lipoma.* Chirurgia 2009;104(3): 363-367

REFERENCES

1. **Bos ACRK, Matthijsen RA, van Erning FN, van Oijen MGH, Rutten HJT, Lemmens VEPP.** *Treatment and Outcome of Synchronous Colorectal Carcinomas: A Nationwide Study.* Ann Surg Oncol. 2018 Feb;25(2):414-421. doi: 10.1245/s10434-017-6255-y.
2. **Kim WH, Lee SK, Chung JH, Cho YS, Yoo HM, Kang JK.** *Significance of rectosigmoid polyp as a predictor of proximal colonic polyp.* Yonsei Med J, 41:98-106, 2000.
3. **Bick, Benjamin L., Ponugoti, Prasanna L., Rex, Douglas K.**; *High yield of synchronous lesions in referred patients with large lateral spreading colorectal tumors.* Gastrointest Endosc. 2017 Jan;85(1):228-233. doi: 10.1016/j.gie.2016.06.035;
4. **Bobic, Simona, Constantin, Vlad D., Albu Kaya, Mădălina, Marin, Ştefania, Dănilă, Elena, Dimitriu, Mihai, Socea, Bogdan.** *Postoperative peritoneal adhesions prophylaxy using collagen-based biomaterials.* Proceedings of the 7th International Conference on Advanced Materials and Systems (ICAMS 2018), p. 45-50.
5. **Bobic, Simona, Constantin, Vlad D., Budu Vlad A., Socea, Bogdan, Popescu, Gheorghe H., Nica, Elvira**. *Proactive therapeutical modulation of the postoperative intraperitoneal adhesions- the efficacy of the collagen-based biomaterials (simple and composite).* Unified Journal Of Medicine And Medical Sciences, 2016, 2(1): 001-009.
6. **Bobic, Simona, Popa, Florian, Socea, Bogdan, Carâp, Alexandru C., Davițoiu, Dragoş V., Constantin, Vlad D.** *Blunt abdominal trauma and peritoneal adhesions.* Research and Science Today. 2018, 1(15): 119-31.
7. **Panisch, Joel F.** *Management of patients with polypoid lesions of the colon. Current concept and cotroversies.* Am J Gastroenterol, 71:3:315-24, 1979.
8. **Dashti, S Ghazaleh et al.** *Alcohol Consumption and the Risk of Colorectal Cancer for Mismatch Repair Gene Mutation Carriers.* Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology, vol. 26, 3 (2016): 366-375.
9. **Lorenzon, Laura et al.** *Evidence based medicine and surgical approaches for colon cancer: evidences, benefits and limitations of the laparoscopic vs open resection.* World journal of gastroenterology vol. 20, 13 (2014): 3680-92.
10. **Socea B, Nica A, Bratu O, Diaconu C, Smaranda A, Socea L, Bertesteanu S, Dimitriu M, Carap A, Constantin V**. *Incidental finding of a sigmoid intussusception associated with rectal prolapse-a case report.* Arch Balk Med Union, 2018, 53(1): 143-146.
11. **Ionela Mihaela Vladu, Bogdan Socea, Vlad Baleanu et al**. The utility of visceral index in prediction of metabolic syndrome and hypercholeserolemia. Revista de Chimie. 2018; 69(11): 3112-3114
12. **Constantinoiu S, Bârlă R, Iosif C, Cociu L, Gîndea C, Hoară P, Bratu O, Ruşitoru L.** *Difficulties in diagnosis and surgical treatment of a giant retroperitoneal lipoma*. Chirurgia 2009;104(3): 363-367.