NEUROENDOCRINE TUMOR OF THE APPENDIX AND TUBERCULOSIS OF THE CAECUM IN A PATIENT WITH ACUTE APPENDICITIS

L. Ionescu^{1,4}, R. Danila^{1,4,*}, C. Vulpoi^{2,4}, D. Ciobanu^{3,4}, L. Lozneanu^{3,4}

“Gr. T. Popa” University of Medicine and Pharmacy, ¹Dept. of Surgery, ²Dept. of Endocrinology, ³Dept. of Pathology, ⁴“St. Spiridon” University Hospital, Iasi, Romania

The appendix is the most common location for carcinoid tumors and establishing the diagnosis incidentally following appendectomy for acute appendicitis is reported from 0.4-1.13 % (1, 2). The most common anatomic locations for intestinal tuberculosis (TB) are the ileo-caecal valve and caecum and due to its nonspecific features poses diagnostic challenges (3). Following a laparoscopic appendectomy performed

in a 18-year old female patient for acute appendicitis the pathology report additionally revealed a carcinoid tumor staged as NET-G1, Pt4Nx L0 V1 Pn0 (Fig. 1). Immunohistochemistry assay revealed intense positive synaptophysin (Fig. 2). Neuroendocrine markers were within normal limits: chromogranin A-57 ug/L (N: 27-94) serotonin-318ug/L (N:80-400), 5-HIAA-5,4MG/24h(N:2-9). Subsequently, a right

Figure 1. Acute appendicitis and carcinoid tumor nests.

Figure 2. Immunohistochemistry assay revealed intense positive synaptophysin, anti-synaptophysin, X10.

Figure 3. Ulceration of the caecum measuring 1.3 cm with red hemorrhagic and irregular border.

Figure 4. Tuberculous granulomas with a tendency for coalescence and central caseation necrosis of the ileo-caecal valve.

References

hemicolectomy was performed and the macroscopical examination of the specimen revealed an ulceration of the ileo-caecal valve (Fig. 3). The final pathology report described multiple tuberculous (TB) granulomas with a tendency for coalescence and central caseation necrosis of the ileo-caecal valve (Fig. 4). The postoperative course was uneventful and antiTB therapy was started. The follow-up at 6 months revealed a patient in excellent condition without clinical, biological or imagistical criteria for recurrence of both NET and TB. The association between carcinoid tumor and ileo-caecal TB is extremely rare and requires an interdisciplinary team management and a long term follow-up.

Conflict of interest

The authors declare that they have no conflict of interest concerning this article.

1. In't Hof KH, van der Wal HC, Kazemier G and Lange JF. Carcinoid tumor of the Appendix: An Analysis of 1,485 consecutive Emergency Appendectomies. *Gastrointest Surg* 2008; 12(8): 1436–1438.
2. Ozer MT, Demirbas S, Celik E, Safali M, Harlak A, Coskun K, Ersoz N, Uzar AI. Natural behaviour and surgical treatment of appendiceal carcinoids: an analysis of 2,376 consecutive emergency appendectomies. *Bratisl Lek Listy* 2011; 112(11):619-622.
3. Gan H, Mely M, Zhao J, Zhu L. An Analysis of the Clinical, Endoscopic, and Pathologic Features of Intestinal Tuberculosis. *J Clin Gastroenterol* 2016; 50(6):470-475.

*Correspondence to: Radu Danila MD, “Gr. T. Popa” University of Medicine and Pharmacy, Dept. of Surgery, 1st Independentei Blvd., Iasi, 700011, Romania, E-mail: r_danila@yahoo.com