RE: Hepatocolic Fistula: A Potential Complication Following Radiofrequency Ablation of Liver Lesions in Patients Previously Pancreaticoduodenectomized or Cholecystectomized

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We compliment Yun et al. (1) on their excellent article assessing the safety and effectiveness of percutaneous radiofrequency ablation (RFA) for the treatment of metachronous isolated liver metastases from non-colorectal cancers. Of note, no case of hepatic secondary deposit originating from pancreatic adenocarcinoma (PA) was entertained in that work. In this respect, our report corroborates the experience of others, even if limited, in enrolling hepatic metastases from PA as a possible indication for RFA and describes a hepatocolic fistula as a

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particular type of major complication.

Recently, a 78-year-old man underwent a percutaneous RFA because of a pancreatic cancer metastasis measuring 2.7 cm in diameter and located in segment 5 of the liver (Fig. 1). Three years before, he was submitted for a curative pancreaticoduodenectomy for a cephalo-pancreatic adenocarcinoma staged as pT3 pN0 pM0, IIA, G2 according to the 2010 American Joint Committee on Cancer. No adjuvant chemotherapy was administered for the development of a self-limiting pancreatic fistula. Radiofrequency was successfully applied under ultrasound guidance for 8 minutes reaching 80°C. However, two days after the procedure, the patient experienced pain in the right upper quadrant and fever over 39°C. An abdominal CT scan exhibited a liver abscess at the previous lesion site tightly adherent to the right colic flexure. Ultrasound guided percutaneous abscess drainage was performed and the injection of contrast medium documented the presence of a hepatocolic fistula (Fig. 2) requiring an emergency ileostomy.

Notwithstanding numerous genetic, molecular, diagnostic imaging and therapeutic advances, the prognosis of patients with pancreatic adenocarcinoma remains ominous (2). RFA has been described as a brilliant method to treat hepatocellular carcinoma and hepatic metastases of colorectal and non-colorectal cancers (1). Occasionally, it has been employed in the treatment of liver metastases of

Fig. 1. Magnetic resonance imaging of abdomen showing metastasis of pancreatic adenocarcinoma in segment 5 of liver (ring) in patient previously pancreaticoduodenectomized.

Fig. 2. Injection of contrast medium from percutaneous abscess drainage confirmed presence of hepatocolic fistula.

pancreatic adenocarcinoma (3). The development of a liver abscess following RFA of liver lesions is a phenomenon that is well described and not uncommon (1-3). More rarely, it can further complicate with a hepatocolic fistula (also known as hepatocolonic or abscesso-colonic fistula) and there are two cases only present in the pertinent

literature. Interestingly, this is the first case of hepatocolic fistula ensuing from RFA that was used for the treatment of a metachronous solitary liver metastasis originating from pancreatic adenocarcinoma. So, we think that the previous intervention due to pancreatoduodenectomy (with cholecystectomy) increased the occurrence risk for this severe complication by attracting the colon to the gallbladder bed. The treatment modalities included conservative management with intravenous antibiotics, percutaneous drainage, right hemicolectomy and occlusion of the fistula with n-butyl-2-cyanoacrylate embolization. We decided for a temporary ileostomy to procrastinate a major surgery in case of an ineffective intestinal diversion.

REFERENCES

1. Yun BL, Lee JM, Baek JH, Kim SH, Lee JY, Han JK, et al. Radiofrequency ablation for treating liver metastases from a non-colorectal origin. *Korean J Radiol* 2011;12:579-587
2. Thomas KT, Bream PR Jr, Berlin J, Meranze SG, Wright JK, Chari RS. Use of percutaneous drainage to treat hepatic abscess after radiofrequency ablation of metastatic pancreatic adenocarcinoma. *Am Surg* 2004;70:496-499
3. Poggi G, Riccardi A, Quaretti P, Teragni C, Delmonte A, Amatu A, et al. Complications of percutaneous radiofrequency thermal ablation of primary and secondary lesions of the liver. *Anticancer Res* 2007;27:2911-2916