Abdominal Pain Following Drug-Eluting Bead Transarterial Chemoembolisation

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WHAT IS THE DIAGNOSIS?

Acute ischemic cholecystitis following DEB TACE.

DISCUSSION

Drug-eluting bead transarterial chemoembolisation (DEB TACE) is a therapeutic option in the management of hepatocellular carcinoma that reduces vascular supply to the tumour and delivers intra-arterial chemotherapy coated beads directly to the lesion. Unlike, hepatic tissue, the gallbladder does not have a dual vascular supply and thus with selective hepatic artery chemoembolisation there is a risk of inducing gallbladder ischemia and acute cholecystitis. The incidence of this complication is reported to be between 0.3 and 10%.¹ It is more common with right lobar chemoembolisation, likely related to inadvertent embolization of the cystic artery, which normally originates from the right hepatic artery. This form of cholecystitis often improves with conservative management although cases requiring urgent cholecystectomy have been reported.² The new findings of gallbladder wall thickening on ultrasound (Figure 1) suggests cholecystitis and the discontinuous enhancement of the gallbladder wall seen on CT (Figure 2) are consistent with regions of gallbladder wall necrosis secondary to DEB TACE induced ischemia. Our patient was managed with five days of intravenous piperacillin and tazobactam (4.5 g three times daily) and then switched to oral antibiotics for one week. At one month follow-up he had made a complete recovery and was asymptomatic.

While a number of differential diagnosis need to be considered in a patient with abdominal pain after transarterial chemoembolization, including post-embolization syndrome and, less commonly, hepatic abscess formation, one must consider cholecystitis especially for right sided hepatic tumors.

Figure 1 Ultrasound showing gallbladder wall thickening.

Figure 2 CT scan showing discontinuous enhancement of gallbladder wall.

CONFLICTS OF INTEREST

All authors have none to declare.

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Abbreviations: DEB TACE: Drug-eluting bead transarterial chemoembolisation

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