Letter to the Editor

Role of magnetic resonance imaging in intrathoracic hepatocarcinoma diagnosis

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We have read with great interest the article by Scanagatta and colleagues [1] reporting the case of a huge hepatocarcinoma (HCC) with intrathoracic extension. The authors addressed the diagnostic challenge to recognise tumour origin and possible pitfalls with intrathoracic neoplasm; they also advocated the use of magnetic resonance imaging (MRI) to better characterise lesion relationships.

As we can deduce from Fig. 1(c), it seems a case of HCC on normal liver, which is infrequent and presents several diagnostic pitfalls. HCCs are hypervascular tumours and demonstrate a strong arterial enhancement [2]; for this reason, the finding of a single esotic mass that extensively infiltrates liver parenchyma with a strong arterial enhancement should be addressed in the first instance as HCC; in Fig. 1(b) and (c), we can observe an arterial acquisition. Nevertheless, the tumour does not seem to present a strong arterial enhancement; this could be related to the extensive intra-tumoral necrosis. However, we wonder if the authors have used a bolus-tracking technique to obtain a correct arterial phase and also which acquisition delay has been applied?

In Fig. 1(c), it also seems to appreciate a perihepatic effusion without significant pleural effusion, which is an infrequent finding for an extensive intrathoracic tumour.

By our experience, we do not think that MRI could be useful to better define, in this case, tumour origin and relationships. This is essentially because MRI has a lower spatial resolution (3-mm slice thickness using volumetric sequences) compared with multidetector computed tomography (MDCT) (0.6-mm slice thickness) [3]. The real advantages of MRI in characterisation of a liver lesion are represented by its intrinsic contrast, which offers the possibility to characterise the different components of the lesion (haemorrhage, fat and iron) [4] and also by the possibility to administrate hepatobiliary-specific medium contrast, which permits to distinguish lesions from functioning hepatocytes or Kupffer cells [5].

We conclude that, in this case, MDCT represents the best technique in the attempt to characterise the lesion and its spatial relationships, and to permit a complete oncological staging with whole body examination.

References


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Reply to the Letter to the Editor

Reply to De Cecco et al.

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