



CASE OF THE MONTH TEMPLATE

Please find the 'template' guidelines for how the case of the month database entries should be submitted. The following is required to enable us to publish your Case of the Month media files.

SUMMARY: (maximum of 250 characters) (Required)
FULL DESCRIPTION OF CASE: (see below) (Required) please make references to your media and image files to support the Case.
WEB LINK: (Optional)
WEB LINK LABEL: (This is the text shown for the link on the webpage) (Optional)
MEDIA FILE: (This can be avi file, pdf, PowerPoint) (Optional)
MEDIA FILE LABEL: (Optional)

You can also display up to 10 image files (BMP, JPEG, GIF) but fewer if including videos

Instructions for authors

General: The EFSUMB Case of the Month and Techniques Library is an online-only supplement dedicated entirely to case studies and ultrasound techniques. Articles appearing in this section are freely and permanently accessible online immediately upon publication at <http://www.efsumb.org/case-month>.

Submission: Manuscripts are submitted through EFSUMB or directly to majja.radzina@efsumb.org

Format: Articles should not contain more information than listed below.

Abstract: The Case of the Month section does not have abstracts.

Main document:

Title page: Showing full title, names of all authors with initials only of forenames, main affiliation of each author, plus the name and full address of the corresponding author (with fax and email details).

Text: Maximum 500 words (exceptions should be discussed). The text should not be subdivided. The text should include the key point of the image or technique of the month.

Figure legends and video legends: Please include these in the main document and ensure that they are cited in the text.

References: Maximum of three references (exceptions should be discussed) listed in order of citation and in the Ultraschall reference style, Dietrich CF, Mertens JC, Braden B, Schuessler G, Ott M, Ignee A. Contrast-enhanced ultrasound of histologically proven liver hemangiomas. *Hepatology* 2007; 45(5):1139-1145.

Figures: A minimum of one and maximum of ten images, with short legends. For example, the maximum three images might comprise one figure with three images (Figures 1a, 1b, 1c), or two (or three) separate images (figures).

Videos Should you wish to submit a video clip to illustrate your article, the following formats are acceptable: *.avi, *.mov and *.mpg. The maximum length of the clip should not exceed one minute. Please also include a legend of no more than 40 words per video or per sequence to accompany it.

Language: Case submission should be provided in English and if possible also in native language of author.

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Please find below an example which has been recently published on <http://www.efsumb.org>.

Focal nodular hyperplasia

Sustained enhancement in the late portal venous phase characterizes most benign solid liver lesions [1]. They can be further characterized by enhancement patterns during the arterial phase: e.g. enhancement of the whole lesion (typical of focal nodular hyperplasia (FNH)) or initial peripheral globular-nodular enhancement (haemangioma) [2]. Focal nodular hyperplasia (FNH) and hepatocellular adenoma (HCA) are two benign, mostly incidentally discovered hepatic neoplasia, which occur predominantly in young and middle-aged women. FNH is typically an iso-echoic tumour of variable size, with a central scar and calcifications. Typically, colour Doppler imaging reveals a (arterially) hyper-vascularised tumour with characteristic (para-) central arterial blood supply and wheel-spoke phenomenon. This typical pattern of vascularity is by no means obligatory and is reported only in about 50 - 70 % of patients. It could also be shown that inter-observer reliability in recognising the wheel-spoke appearance is low. Hepatic adenomas are frequently seen in adult patients with glycogen storage diseases, but their pathogenesis is not completely understood. Differentiation diagnosis is essential because of different therapeutic approaches: HCA at least with a size > 50 mm is an indication for surgery because of the risk of haemorrhage and potential malignant transformation; in contrast, FNH can be managed conservatively. Like FNH, an adenoma exhibits arterial hypervascularity (predominantly marginal). However, this vascular pattern can also be encountered in hepatocellular carcinomas and hyper-perfused metastases, and is therefore not pathognomonic. It has to be taken into account that histologically no portal veins (and in addition, no bile ducts) are present in adenomas [3].

Key point 1

The examination of the hepatic arterial and portal venous and late phases by contrast-enhanced ultrasound allows for reliable differentiation between FNH and HCA. This important finding could be explained by the lack of portal veins in HCA, in contrast to FNH which presents arteries [Figure 1a] and (atypical) portal veins [Figure 1b].

References

1. Dietrich CF, Ignee A, Trojan J, Fellbaum C, Schuessler G. Improved characterisation of histologically proven liver tumours by contrast enhanced ultrasonography during the portal venous and specific late phase of SHU 508A. *Gut* 2004; 53(3):401-405.
2. Dietrich CF, Mertens JC, Braden B, Schuessler G, Ott M, Ignee A. Contrast-enhanced ultrasound of histologically proven liver hemangiomas. *Hepatology* 2007; 45(5):1139-1145.
3. Dietrich CF, Schuessler G, Trojan J, Fellbaum C, Ignee A. Differentiation of focal nodular hyperplasia and hepatocellular adenoma by contrast-enhanced ultrasound. *Br J Radiol* 2005; 78(932):704-707.