

A

Postgraduate Educational Programme

Session numbers are prefixed by:

CC, E³, EF, EM, HL, MC, NH, PC, RC, SA, SF, SK

Presentation numbers are prefixed by the letter A

Sun, March 6, 08:30 - 10:00

Room C

Abdominal Viscera

CC 1118

Surprise in the liver

Moderator:

C. Bartolozzi; Pisa/IT

A-299 08:30

A. Clinical considerations

A. Palkó; Szeged/HU

Focal liver lesions are part of our everyday practice because radiologists performing various types of examinations may encounter them without being aware of any clinical condition raising the suspicion of these changes. In a situation like this several important decisions are to be made by the radiologists, like: is the lesion clinically significant, is the lesion benign or malignant, are additional imaging examinations necessary, does it require medical, surgical or interventional radiological action, should it be, and if yes, how frequently followed up, etc. For providing a well-established answer to these questions the reporting radiologist has to be familiar with medical history and results of former examinations (physical, laboratory, imaging, etc.); consider the age, gender, physical condition, eating and drinking habits, potential drug abuse of the patient; bearing in mind the prevalence and statistical probabilities of different pathologic conditions. With all this information at hand the thorough analysis of images obtained by different modalities will allow a rather reliable differential diagnosis and a well-established planning of therapy of the incidentally detected lesions.

A-300 09:00

B. Imaging techniques and typical findings

C.J. Zech; Munich/DE

The spectrum of differential diagnoses is broad in the liver. Therefore, incidentally discovered liver lesions represent a challenging clinical situation. Fortunately, there are specific imaging features for the most common benign and malignant liver lesions (such as, e.g. hemangioma, FNH, cysts, vascular pseudolesions, HCC and metastases) so that a minimal-invasive diagnosis with a biopsy is not needed in a lot of cases. In ultrasound, the echogenicity and recently also the contrast agent behaviour are used for liver lesions characterisation. In CT, attenuation and also contrast agent behaviour are used for characterisation. MR imaging offers several options including T1- and T2-weighted images, use of chemical shift imaging, GRE sequences with long echos and diffusion weighted images, so that tissue components such as fat, water, glycogen, iron, etc. can be evaluated already in the pre-contrast examination. Beside the evaluation of dynamic signal characteristics in the early dynamic phase after contrast agent application, MR can utilize also tissue-specific contrast agents dedicated to the RES or to

the hepatocytes. Other modalities such as angiography, PET or other nuclear medicine methods usually only play a minor role nowadays in the evaluation of incidental liver lesions in non-oncological patients. In oncological patients the clinical consequences and also the range of diagnoses and pre-test probabilities are different from the non-oncological group; therefore, the demands to imaging are even higher. In case of atypical presentation of otherwise benign liver lesions such as sclerosed hemangioma close follow-up or even biopsy can be necessary in such a setting.

A-301 09:30

C. Interactive case discussion

G. Brancatelli; Palermo/IT

Incidental lesions are frequently discovered during routine radiographic evaluations. Correlation with clinical history and additional confirmatory imaging is essential to the development of an accurate, focused differential diagnosis and for appropriate management. The objective of this presentation is to describe the imaging findings associated with incidentally found liver lesions and to review those clinical and radiologic features, which should be considered in development of an ordered and accurate differential diagnosis.