Correlation of LI-RADS observations with histological diagnosis in patients with hepatocellular carcinoma

**BACKGROUND**

Hepatocellular carcinoma (HCC) is the most common primary malignancy of the liver and the second leading cause of cancer death in the world (1).

**METHODS**

Liver Imaging Reporting and Data System (LI-RADS) 2018 is an evidence based system devised by the American College of Radiology to classify lesions with high risk of developing HCC, the most recent iteration was released in 2018 (Figure 1).

**PURPOSE**

Correlation of radiological findings with histological diagnosis in patients with suspected hepatocellular carcinoma

**RESULTS**

- 197 nodules in 81 patients were included.
- The frequency of LR3, LR4, LR5, LRM/LRTIV/LRTR lesions was (number of lesions): 58, 41, 92, 9, respectively.
- Histological diagnosis was obtained in 18 patients with 38 lesions classified as LR4 or above.
- 32 lesions were confirmed as HCC on histopathology, sensitivity 84.21% (95% CI; 68.75% to 93.98%).

**CONCLUSION**

- The data shows good radio-pathological correlation between definite and probable HCC when using LI-RADS criteria.
- LI-RADS reporting has the potential to improve clarity in the diagnosis of HCC and discussion at the MDT meeting. This should improve communication between clinical groups and aid consistency in management in terms of treatment of lesions and follow up. The system also helps to provide a framework for audit of performance and decision making.

**REFERENCES**