

Contents

+ Introduction	4
+ Aim of the work	6
+ Abbreviations	7
+ Benign malignant liver tumours	9
+ Liver metastases	22
+ MR imaging	23
+ Basic principles of magnetic resonance imaging	26
+ Contrast media of liver MRI:	36
• Non specific extracellular Gd-chelates	38
• Hepatocyte-selective contrast agents	40
• Hepato-biliary contrast agent	42
• Reticulo-endothelial system-specific contrast agents	43
+ Liver MRI technique and concepts	47
+ Radiological classification of focal liver lesion	
on un-enhanced and contrast enhanced	53
+ Imaging of common focal liver by available contrast agents	55
• Benign focal liver lesion of hepatocellular origin	57
▪ Focal nodular hyperplasia	57
▪ Nodular regenerative hyperplasia	61
▪ Hepato cellular adenoma	62
▪ Pyogenic abscess	64
▪ Amaebic abscess	65
• Benign focal liver lesion on non hepato cellular origin	66

▪ Cavernous & Capillary haemangioma	66
+ Malignant focal liver lesions of hepato cellular origin from regenerative nodule to hepato cellular Carcinoma.	70
+ Malignant focal liver lesion of non hepato cellular origin	77
+ Hypervascular metastases	80
+ Cholangio carcinoma	83
+ Summary	86
+ References	93
+ الملخص العربي	