

Review

Imaging Features of Main Hepatic Resections: The Radiologist Challenging

Carmen Cutolo ¹, Roberta Fusco ^{2,*}, Igino Simonetti ³, Federica De Muzio ⁴, Francesca Grassi ⁵, Piero Trovato ³, Pierpaolo Palumbo ^{6,7}, Federico Bruno ^{6,7}, Nicola Maggialetti ⁸, Alessandra Borgheresi ^{9,10}, Alessandra Bruno ^{9,10}, Giuditta Chiti ^{7,11}, Eleonora Bicci ^{7,11}, Maria Chiara Brunese ⁴, Andrea Giovagnoni ^{9,10}, Vittorio Miele ^{7,11}, Antonio Barile ^{12}, Francesco Izzo ^{13} and Vincenza Granata ^{3}

¹ Department of Medicine, Surgery and Dentistry, University of Salerno, 84084 Salerno, Italy

² Medical Oncology Division, Igea SpA, 80013 Napoli, Italy

³ Division of Radiology, Istituto Nazionale Tumori IRCCS Fondazione Pascale—IRCCS di Napoli, 80131 Naples, Italy

⁴ Department of Medicine and Health Sciences “V. Tiberio”, University of Molise, 86100 Campobasso, Italy

⁵ Division of Radiology, Università degli Studi della Campania Luigi Vanvitelli, 80127 Naples, Italy

⁶ Department of Diagnostic Imaging, Area of Cardiovascular and Interventional Imaging, Abruzzo Health Unit 1, 67100 L’Aquila, Italy

⁷ Italian Society of Medical and Interventional Radiology (SIRM), SIRM Foundation, Via della Signora 2, 20122 Milan, Italy

⁸ Department of Medical Science, Neuroscience and Sensory Organs (DSMBNOS), University of Bari “Aldo Moro”, 70124 Bari, Italy

⁹ Department of Radiology, University Hospital “Azienda Ospedaliera Universitaria delle Marche”, Via Conca 71, 60126 Ancona, Italy

¹⁰ Department of Clinical, Special and Dental Sciences, University Politecnica delle Marche, Via Conca 71, 60126 Ancona, Italy

¹¹ Department of Emergency Radiology, University Hospital Careggi, Largo Brambilla 3, 50134 Florence, Italy

¹² Department of Applied Clinical Sciences and Biotechnology, University of L’Aquila, 67100 L’Aquila, Italy

¹³ Division of Epatobiliary Surgical Oncology, Istituto Nazionale Tumori IRCCS Fondazione Pascale—IRCCS di Napoli, 80131 Naples, Italy

* Correspondence: r.fusco@igeamedical.com



Citation: Cutolo, C.; Fusco, R.; Simonetti, I.; De Muzio, F.; Grassi, F.; Trovato, P.; Palumbo, P.; Bruno, F.; Maggialetti, N.; Borgheresi, A.; et al. Imaging Features of Main Hepatic Resections: The Radiologist Challenging. *J. Pers. Med.* **2023**, *13*, 134. <https://doi.org/10.3390/jpm13010134>

Academic Editor: László Mangel

Received: 19 November 2022

Revised: 31 December 2022

Accepted: 6 January 2023

Published: 10 January 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Abstract: Liver resection is still the most effective treatment of primary liver malignancies, including hepatocellular carcinoma (HCC) and cholangiocarcinoma (CCA), and of metastatic disease, such as colorectal liver metastases. The type of liver resection (anatomic versus non anatomic resection) depends on different features, mainly on the type of malignancy (primary liver neoplasm versus metastatic lesion), size of tumor, its relation with blood and biliary vessels, and the volume of future liver remnant (FLR). Imaging plays a critical role in postoperative assessment, offering the possibility to recognize normal postoperative findings and potential complications. Ultrasonography (US) is the first-line diagnostic tool to use in post-surgical phase. However, computed tomography (CT), due to its comprehensive assessment, allows for a more accurate evaluation and more normal findings than the possible postoperative complications. Magnetic resonance imaging (MRI) with cholangiopancreatography (MRCP) and/or hepatospecific contrast agents remains the best tool for bile duct injuries diagnosis and for ischemic cholangitis evaluation. Consequently, radiologists should be familiar with the surgical approaches for a better comprehension of normal postoperative findings and of postoperative complications.

Keywords: hepatic resections; liver; diagnosis; postoperative complications

1. Introduction

In the recent years the number of liver resections is globally rising, according to the increase in occurrence of primary and metastatic cancers [1–4]. Liver resection is still the most effective treatment of primary liver malignancies, including hepatocellular carcinoma

(HCC) and cholangiocarcinoma (CCA), and of metastatic disease, such as colorectal liver metastases [5–10].

In the field of liver resection, according to the Brisbane 2000 terminology, liver resections could be classified as anatomic and not anatomic resection [10]. The type of liver resection (anatomic versus non anatomic resection) depends on different features, mainly on the type of malignancy (primary liver neoplasm versus metastatic lesion), size of tumor, its relation with blood and biliary vessels, and the volume of future liver remnants (FLR) [10]. Knowledge of the liver resection main type is necessary for the radiologist to recognize the radiological common features of post-operative findings, and to identify the possible postoperative complications.

Ultrasonography (US) is the first-line diagnostic tool to use in post-surgical phase. However, computed tomography (CT), due to its comprehensive assessment, allows a more accurate evaluation and more normal findings than the possible postoperative complications. Magnetic resonance imaging (MRI) with cholangiopancreatography (MRCP) and/or hepatospecific contrast agents remains the best tool for bile duct injuries diagnosis and for ischemic cholangitis evaluation [6].

The purpose of this narrative review is to report the main liver resection, focusing on the definition of anatomic versus non anatomic resection, and on the main regular postoperative radiological features.

Type of Resection

Hepatectomies can be classified as anatomic and non anatomic resections.

2. Anatomic Liver Resection

Anatomic liver resection is defined as the complete removal of the liver parenchyma confined within the responsible portal territory. The portal ramifications define anatomical portions of the liver. In particular, the first order division of portal ramification defines the “hemi-liver”, the second order division defines the “section”, while the third order division defines the segment.

Therefore, according to the Brisbane classification, anatomic liver resection is defined as segmentectomy (Figures 1 and 2), sectionectomy, sectorectomy, hemipatectomy, and trisectionectomy [10].

The term anatomic segmentectomy is utilized to describe the surgical approach that determine the elimination of a portion of liver parenchymal which correspond to a Couinaud segment. Otherwise, with “subsegmentectomy”, we identify a surgical approach to determine the partial removal of liver tissue within the portal territories of less than a Couinaud’s segment [11].

Anatomic sectionectomy corresponds to the comprehensive elimination of tissues of the second order portal venous branches. these approaches are classified considering the eliminated section. For example, the right anterior is the elimination of the right anterior, including segments 5 and 8, while the right posterior is the elimination of the right posterior, including segments 6 and 7.

The surgical procedure that causes the elimination of the liver to the right of the middle hepatic vein is defined as right hepatectomy. This resection includes segments 5, 6, 7, and 8. When in addition to right hepatectomy, segment 4 is resected, we obtained an extended right hepatectomy, also named right trisectionectomy.

With regard to the elimination of the liver parenchyma to the left of the middle hepatic vein, this approach is the left hepatectomy and includes the segments 2, 3, and 4. For extended left hepatectomy, also named as left trisectionectomy, the additional removal of segments 5 and 8 is intended.



Figure 1. Anatomical bisegmentectomy of VI–VII in patient with metastases from kidney cancer.

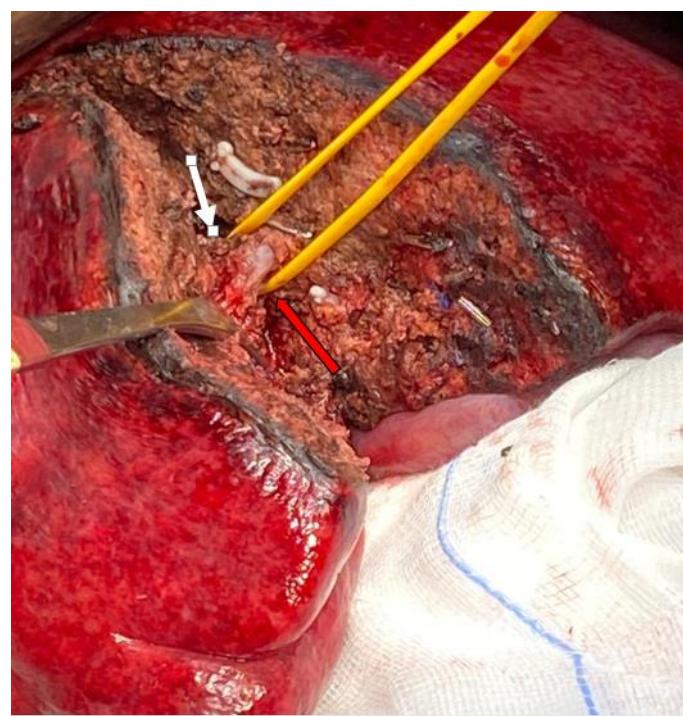


Figure 2. Anatomical segmentectomy of VI in colorectal liver metastasis (white arrow). Portal vein branch of VI–VII (red arrow).

3. Non Anatomic Liver Resection

The surgical procedure known as parenchyma-sparing hepatectomy (PSH) is a limited non anatomical liver resection (Figures 3 and 4). In contradiction of anatomic resections, which involve systematic anatomical hepatic resection, this strategy allows to spare a certain future remnant liver volume and minimize surgical stress and operative risks [12–15].

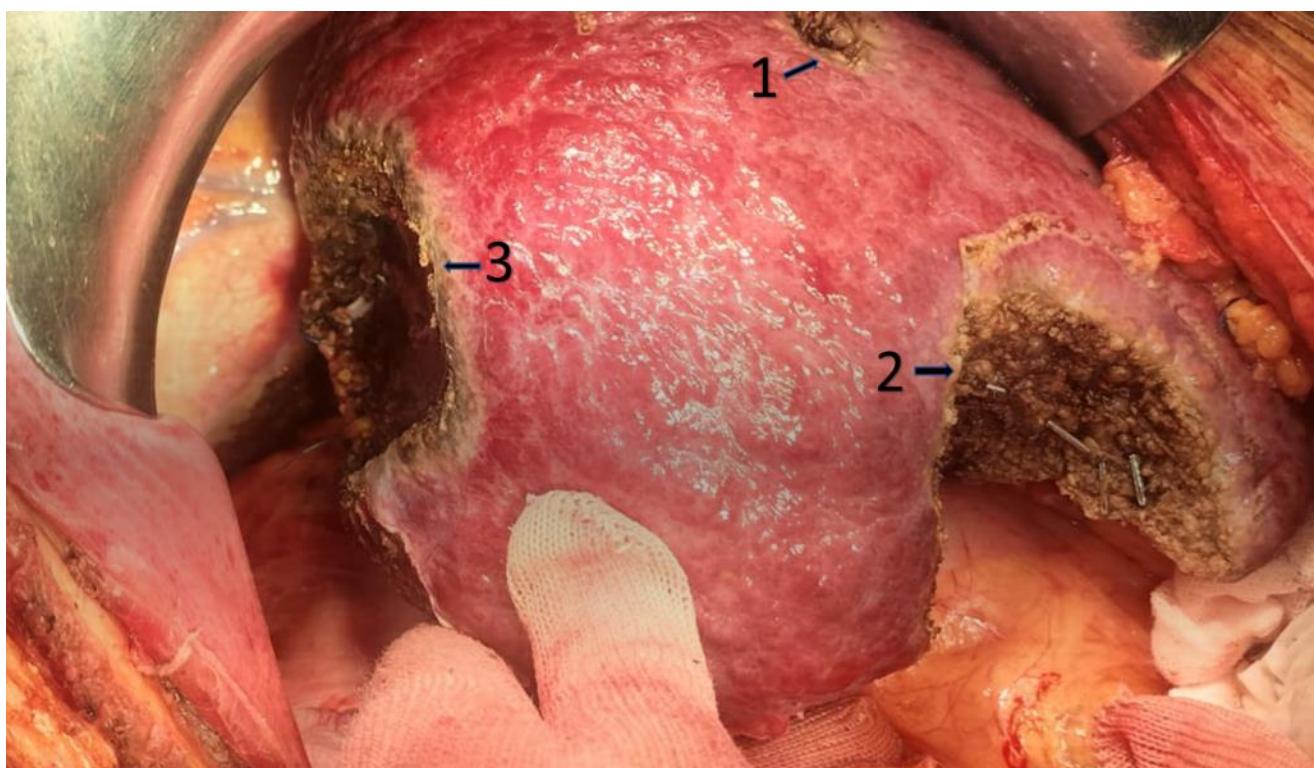


Figure 3. Multiple parenchymal sparing resections in patient with metastases from colorectal cancer. 1: Atypical resection of seg V; 2: Atypical resection of seg V-VI and 3: Atypical resection of segment VII.

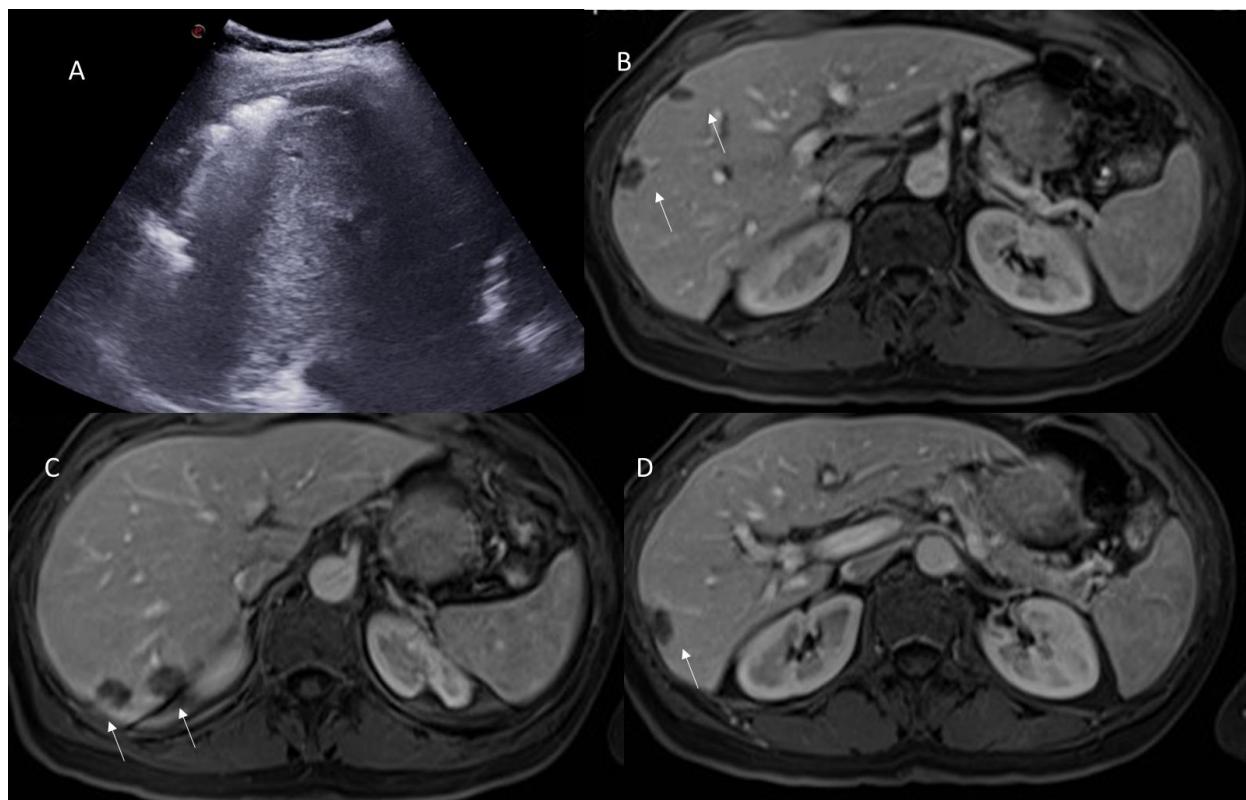


Figure 4. US (A) assessment and CT (B–D) assessment of Figure 3, patient. On portal phase of contrast medium evaluation, arrows ((B): V seg; (C): VII seg and (D): VI seg) show typical fluid collection due to surgical procedure.

The PSH procedure should allow an R0 resection (corresponds to resection for cure or complete remission) with negative surgical margins. Compared to the anatomical resection (AR) approach, it is more technically challenging, since anatomic landmarks, as lobar or sectorial vessels, are not used as a guide to identify the resection margins. Therefore, intraoperative ultrasound plays a key role during PSH, allowing the identification of lesions, the relationship of the lesion with the vital structures (e.g., hepatic veins, portal structures), and the parenchymal transection plan [16].

Although the cut off to obtain negative margins has usually been 1 cm, the introduction of new chemotherapeutic agents has allowed the reduction of this margin at 1 mm, in colorectal metastases (CLM), with good oncological results [17]. Moreover, it has been demonstrated that these new treatments are responsible for similar overall survival (OS) among R0 patients and patients with microscopic positive margins (R1) [18,19]. Hence, surgical resection should also be performed in R1 subgroup patients [18,19].

In addition, according to the new surgical oncology group suggestions, in the absence of extrahepatic disease, the only limits to surgical treatment of CLM patients is correlated to the post procedural liver parenchymal that should be sufficient to prevent liver failure (PLF) [20].

Thanks to the use of the intraoperative US, it is possible to detach lesions from major vessels and to perform accurate flow analysis, preserving communicating vessels among main hepatic veins that should assure an adequate outflow to the liver even after main hepatic vein resection [21–24]. The use of this new procedural technique opened the opportunity to achieve new liver resection sub-types, which could substitute conventional hepatectomies (Figure 5), considering the patient characteristics, to obtain a more personalized treatment [24–30].

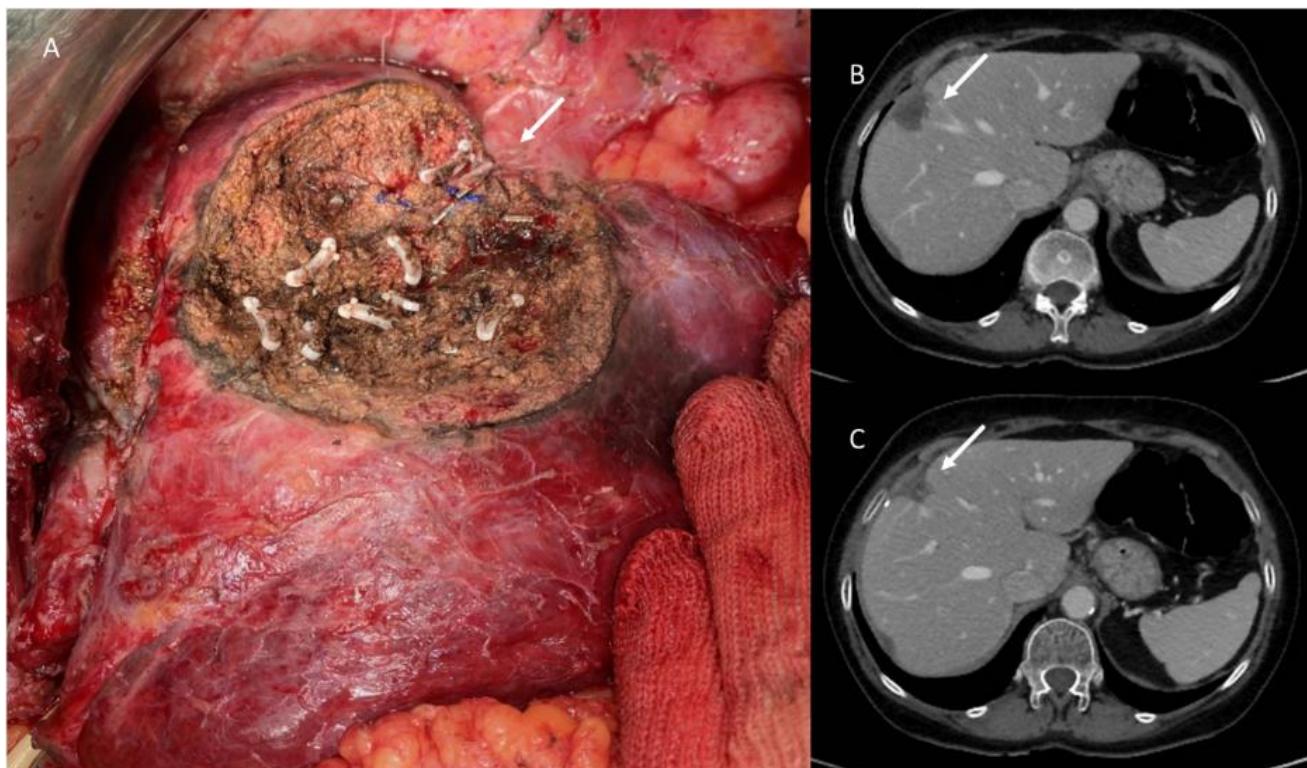


Figure 5. In (A), atypical liver resection of lesion located in V-VIII segment in patient with metastases from colorectal cancer. In (B,C) CT post treatment evaluation. At discharge, arrow shows fluid collection; at 3 month CT follow-up, arrow shows scar tissue (C).

Among all the complex parenchymal sparing strategies, we cite systematic extended right posterior sectionectomy [26], mini upper transversal hepatectomy [24–31], right

upper transversal hepatectomy [28], left upper transversal hepatectomy [24], total upper transversal hepatectomy [24], mini mesohepatectomy [27], liver tunnel [24,30], and liver tunnel extended to segment 4s [24,30].

3.1. Two Stage Hepatectomy and ALPPS

Two stage hepatectomy and associating liver partition with portal vein ligation for staged hepatectomy (ALPPS) are two strategies of treatment for liver disease in patients with insufficient liver function [32].

With regard to two stage hepatectomy, this approach includes two phases: In the first, to obtain hypertrophy of future liver remnant (FLR), the surgeons and/or radiologists perform a surgical ligation or radiological embolization of the portal vein, so that, the redistribution of portal flow induces parenchymal hypertrophy. In the second phase, the surgical approach is performed to remove target lesions.

The ALPPS includes parenchymal splitting and portal vein ligation in the first stage [33]. Complete redistribution of portal blood flow causes FLR hypertrophy. Although this approach increases the patient number that can be subjected to liver resection, it is correlated with significant operative morbidity and mortality [34].

3.2. Treatment and Imaging Assessment

Imaging, with regard to hepatic resection, should be employed in different phases: staging, treatment planning, intra-treatment evaluation, and treatment response assessment, which includes technical success, treatment efficacy, and complications [35–60].

With regard to “technical success”, this is due to the ability of treating the lesion according to the procedure [61], while “technique efficacy”, that should be distinguished from “technical success”, is the “complete resection”, also named R0, of a macroscopic lesion [61]. Complications, defined as any unpredicted deviation from a procedural course, and/or adverse events, recognized as any possible damage correlated to the procedure, should be evaluated according to standardized classification, as the Common Terminology Criteria for Adverse Events and the Clavien–Dindo classification [62]. In addition, any adverse events should be classified considering the severity and the time of occurrence (e.g., during, in post-procedural phase, or late) [61–64].

Different diagnostic techniques may be utilized, alone or as a multimodality approach [65–80]. Computed tomography (CT) and magnetic resonance imaging (MRI) are the main imaging tools employed during the pre-procedural phase in order to evaluate liver lesions [81–98] and in the surveillance phase to assess the efficacy and the safety [99–121].

Ultrasound assessment, also with the employment of contrast medium (CEUS), is a relatively new tool, utilized for problem solving during treatment phases and surveillance [122–132], although the critical point of interest is due to the possibility of real time procedure efficacy assessment. In fact, CEUS allows to detect perfusion change during the procedure, and bearing in mind the higher temporal resolution and the possibility of repeating this diagnostic exam several times in a short period, it is a secure and cost-effective tool for treatment outcome assessment [130–132].

Usually, US is the first tool employed during the post-surgical phase to assess abdominal complications and to evaluate treatment efficacy. CT with contrast agents, normally, is utilized as a follow-up tool to evaluate efficacy and recurrence, while it is the first tool employed in emergency setting (e.g., major complications as posthepatectomy hemorrhage (PHH)) [35–37]. MRI with cholangiopancreatography sequences (MRCP) or with hepatospecific contrast agent (EOB-MRI) is the best modality for diagnosis of early post-operative bile duct injuries and ischemic cholangitis, while during follow-up this tool is a problem solver for indeterminate liver lesions, e.g., new lesions versus abscesses [35–37].

3.3. Post-Surgical Imaging Findings

The post-surgical radiological assessment should be distinguished early, during the first hours after surgery, with a follow-up at the time of discharge and an oncological follow-up taking into account the main guidelines in relation to the type of cancer treated [133–135].

Normally, a diagnostic assessment, during the first hours after surgical procedure is only required in case suspected complications, such as a bleeding or biliary lesion [136–139], while at the time of discharge US assessment is required. CT or MRI should be performed to confirm complications.

3.4. Discharge Assessment

In this phase, radiologist should evaluate: (a) the presence of free fluid, (b) the state of the surgical margins and the remnant liver parenchyma, (c) vascular evaluation (portal vein, hepatic veins, and hepatic arterial branches) as well as any other sites subjected to resection [140–147].

At US assessment, free fluid may present a hypoechoic collection in the posterior recesses or, in the presence of blood, inhomogeneously iso-hypoechoic or hyperechoic [140–147]. In this case, a clinical laboratory evaluation is mandatory, considering the proposal of the International Study Group of Liver Surgery (ISGLS) [148], in which we found a novel definition and staging of PHH. According to these guidelines, PHH is defined as a drop in haemoglobin level >3 g/dL compared to the post-operative baseline level (i.e., haemoglobin level immediately after surgery), with three grades of severity (A-B-C), depending on the therapeutic strategy required [148].

To assess active bleeding and to identify bleeding causes, a multiphasic CT evaluation is mandatory (Figure 6) [149–154]. During pre-contrast CT evaluation, a blood collection with an attenuation of 30–45 HU could be found [155–165]. The presence of the sentinel clot sign, with attenuation values of 45–70 HU, can help identify the site of bleeding. During arterial CT assessment, the active overflow of contrast material is suggestive of arterial bleeding, while low-flow bleeding is detected during venous CT phase [155–160].

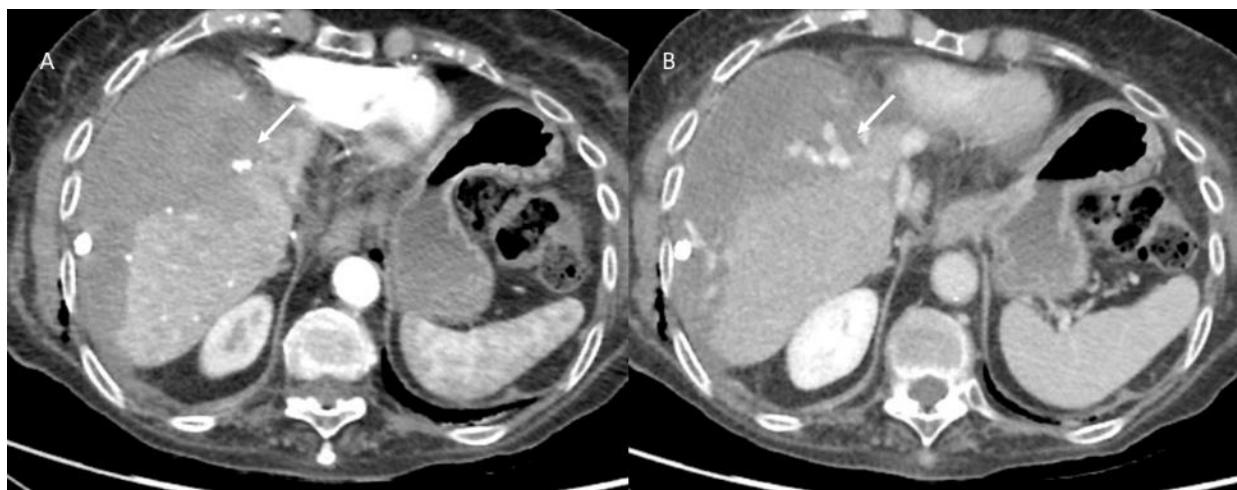


Figure 6. Active bleeding. During arterial CT assessment (A) and portal evaluation (B), arrow shows active overflow of contrast material.

At US assessment, surgical margins may appear hyperechoic compared to surrounding liver parenchymal. In addition, the radiologist should evaluate the presence of post-surgical fluid collections. These entities may be due to the presence of haematomas (50%), bilomas (25%) and abscesses (25%) [35].

Hematoma may appear as a biconvex or growing intraparenchymal lesion, with suprafluid echogenicity at US or density at unenhanced CT (between 50 and 60 HU) [35,161–164].

Biloma is an encapsulated collection of bile outside the biliary tree [35]. At US assessment, it may appear as simple fluid collections [35]. If a biloma is supplied, we have a bile leak. A definition for bile leak was standardized by the ISGELS [165]. The leakage may be due to an incompetent bile-digestive anastomosis or a bile ducts damage during the surgical procedure [166–171]. At US or CT examination, bile leaks may appear as a non-specific collection near the resection margins [165]. MRI with gadolinium-based hepatobiliary contrast agent (EOB-MRI) allows for proper site detection so as to classify the leakage sub-type (Figure 7) [161–177]. On EOB-phase, bile leak is detected as an active overflow of contrast agent outside the biliary tree and inside the fluid collection [35].

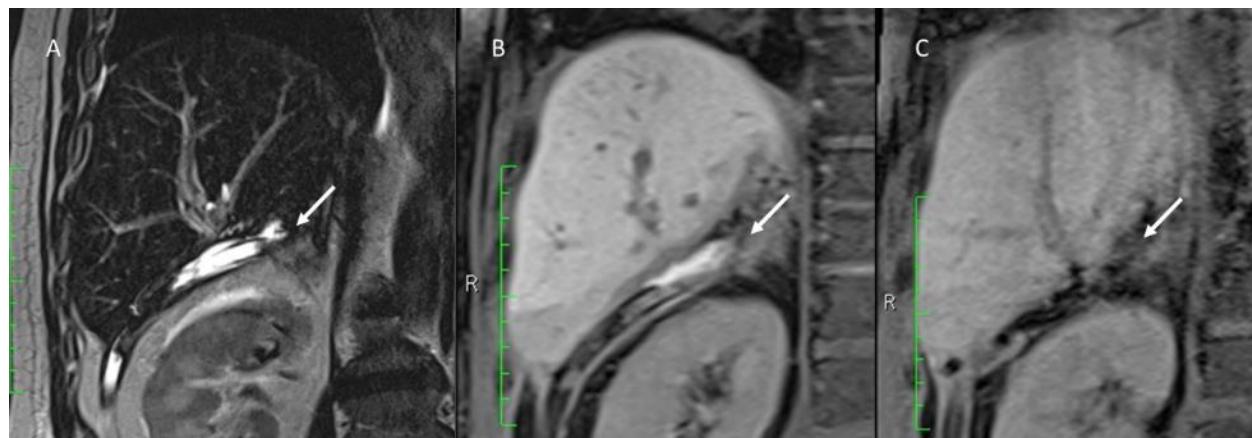


Figure 7. Post-surgical MRI assessment. In (A) T2-W sequences shows (arrow) fluid collection. In (B), On EOB-phase, bile leak is detected as an active overflow of contrast material outside biliary tree and inside the fluid collection (arrow). In (C) EOB-phase post bile leak treatment evaluation, no overflow of contrast medium.

Air artefacts within a supra-fluid collection that do not show central perfusion at color Doppler assessment in patients with high grade fever is suggestive of an abscess [35]. CT confirms the diagnosis showing the typical features of a double target appearance, characterized by a central hypodense core of fluid surrounded by a hyperdense rim and a hypodense outer ring [35]. The use of haemostatic glues on the resective margins could mimic an abscess due to the presence of hypodense microbubbles [78]. An accurate clinical evaluation (absence of fever and inflammation indices) allows a correct diagnosis [78].

The radiological appearance of remnant liver parenchymal is complex and is correlated to the type of surgical procedure, the segment resected (one or more segments), the quality of residual parenchymal (cirrhotic or chemotherapy-induced steatohepatitis) [178]. A non-typical finding is the hepatitis due to treatment, that can be hepatocellular, cholestatic, or mixed [140,178]. During imaging assessment, it is possible to find hepatomegaly, perihepatic fluid, lymphadenopathy, and periportal edema [140]. The main feature is the gallbladder wall thickening or gallbladder fossa edema. On US assessment, typical findings are a parenchymal echogenicity decreasing with an increase of the portal vein conspicuity (known as “starry sky”) [178]. On CT or MRI evaluation, it appears as liver attenuation decreasing or diffuse hyperintensity in T2-weighted (T2-W) sequences [140,178]. During contrast medium evaluation, a heterogeneous parenchymal enhancement, due to perfusion re-assessment, could be detected. Severe cholestatic hepatitis on MRCP appears as a decreasing of the tertiary bile ducts number [178].

Vascular assessment provides for the evaluation of the flow of the main arterial and venous branches [179–189]. Therefore, the first tool to use can be the color Doppler. In uncooperative patients or in doubtful cases, multi-phases CT is the best tool to use [35].

Clinically, vein thrombosis may be asymptomatic or may cause abdominal pain if the superior mesenteric vessels are involved due to bowel congestion or ischemia [158,190,191]. When not detected, collateral vessels will grow, and the patient will develop portal vein

cavernous transformation [192]. Otherwise, arterial thrombosis may cause liver failure, sepsis, or abscess [160].

On US assessment, a limited thrombus is seen as an echogenic area within vessel, in the absence or with a slow portal flow on Doppler images. In addition, on color Doppler US, vein thrombosis is characterized by the loss of a triphasic waveforms pattern with a decrease in hepatic vein velocity and in portal flow [35,193]. On CT contrast study evaluation, arterial or portal thrombosis appears as an intraluminal filling defect of the hepatic artery or portal vein, during arterial and porta phase, respectively. Venous thrombosis could be intercepted on unenhanced CT as intraluminal hyperattenuating spots within the vessel [35]. In addition, during arterial phase and correlated to the compensatory augmentation of local arterial flow, it is possible to find a segmental enhancement (transient arterial hyperenhancement- THAD) of the tributary liver parenchyma [35].

3.5. Follow-Up Assessment

During the follow-ups scheduled in relation to the patient's cancer history, the findings described at discharge change [140].

In the patient with a functioning liver, free effusion disappears [140], the intra liver collections reduce in size (Figure 8), and they are replaced by scar tissue (Figure 9) [140].

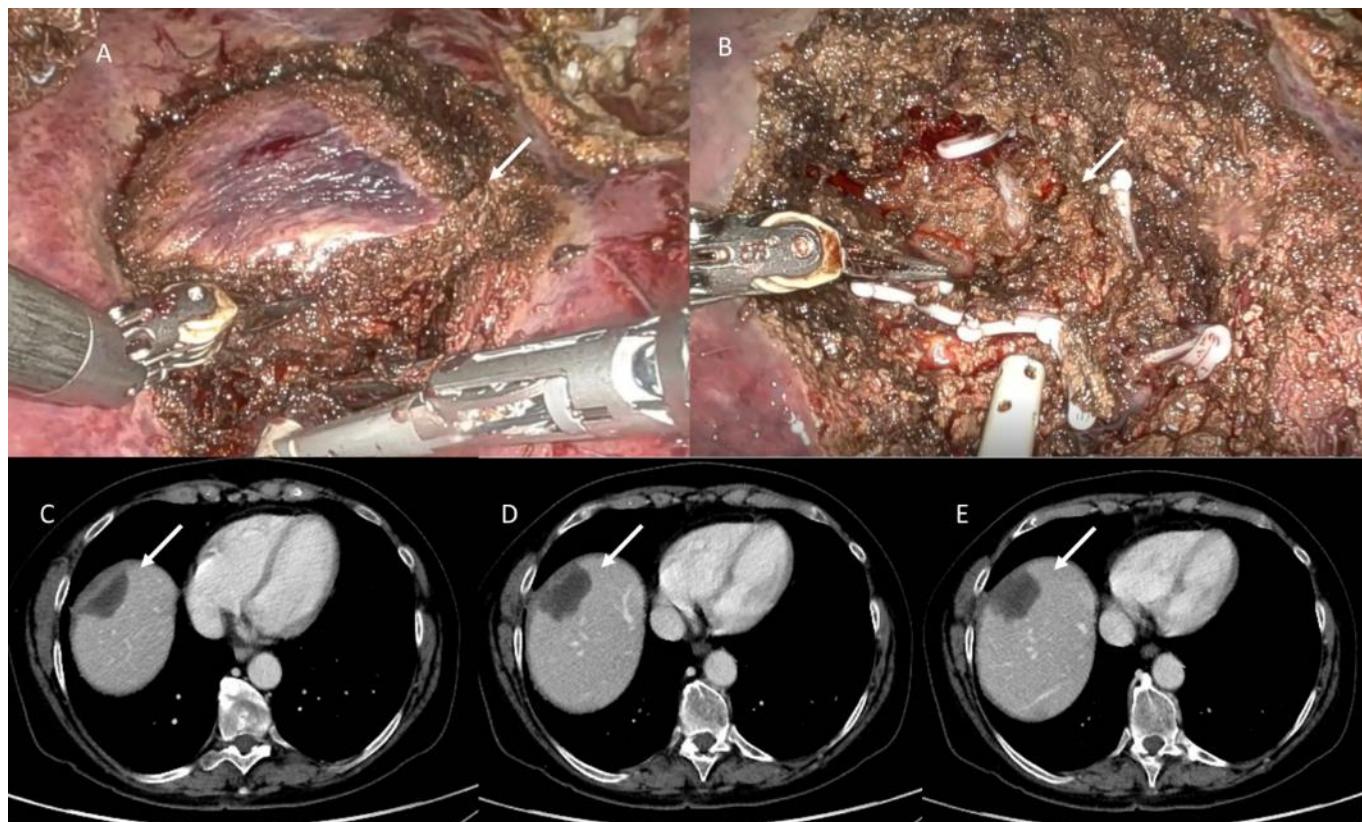


Figure 8. In (A,B) robotic atypical resection of lesion located in segment VIII. In (C–E), CT evaluation: arrows show fluid collection.

This tissue should be correctly distinguished from new lesions, expressions of disease recurrence [140,194–203]. On US assessment, scar tissue is iso-hyperechoic without contrast enhancement during CEUS evaluation [140]. CT and MRI allow the proper lesions characterization [204–213], also thanks to the possibility of functional evaluation (diffusion weighted imaging and radiomics) [214–219].

With regard to remnant liver parenchyma, hepatitis is replaced by hepatic regeneration, so radiologist should know the type of surgical procedure to correctly localize new

lesions [140]. Otherwise, the correct localization is possible with the identification of the main arterial and venous branches, and so as a biliary tree [140].

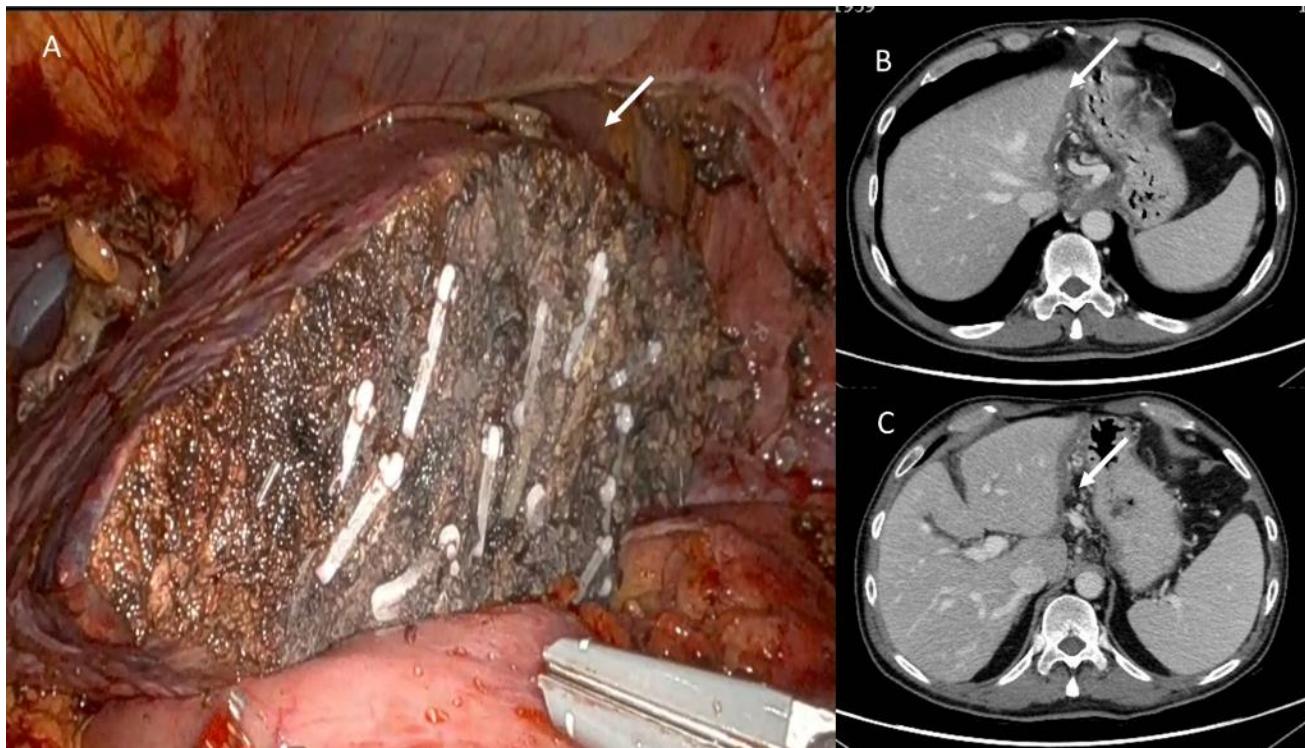


Figure 9. Robotic Anatomical S2 segmentectomy in patient with HCC (A). In (B,C), CT assessment at 3 months follow-up: arrows show scar tissue.

3.6. Two Stage Hepatectomy and ALLPS Assessment

With regard to two stage hepatectomy and ALLPS radiological evaluation, these procedures cause a selective portal vein occlusion to obtain a hypertrophy of future liver remnant [32–34]. So, in this context, the radiologist should evaluate vein thrombosis and the liver parenchymal compared to pre-treatment diagnostic study. However, the assessment of hepatic regeneration is a volumetric evaluation, and this is not correlated to the real parenchymal functionality [220–222].

4. Conclusions

The knowledge of the main type of liver resection is necessary for the radiologist to recognize the radiological common features of post-operative findings and identify the possible postoperative complications.

US is the first-line imaging examination during the postoperative monitoring. However, CT is of greater value for identifying normal findings after surgery, and the possible postoperative complications. MRI is the best modality for the diagnosis of early postoperative bile duct injuries and to assess recurrence.

Author Contributions: All authors contributed at the investigation and methodology of the manuscript. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Data are reported in the manuscript.

Acknowledgments: The authors are grateful to Alessandra Trocino, librarian at the National Cancer Institute of Naples, Italy.

Conflicts of Interest: The authors have no conflict of interest to be disclosed. The authors confirm that the article is not under consideration for publication elsewhere. Each author has participated sufficiently to take public responsibility for the content of the manuscript.

References

1. Lafaro, K.J.; Stewart, C.; Fong, A.; Fong, Y. Robotic Liver Resection. *Surg. Clin. N. Am.* **2020**, *100*, 265–281. [[CrossRef](#)] [[PubMed](#)]
2. Agarwal, V.; Divatia, J.V. Enhanced recovery after surgery in liver resection: Current concepts and controversies. *Korean J. Anesthesiol.* **2019**, *72*, 119–129. [[CrossRef](#)] [[PubMed](#)]
3. Izzo, F.; Granata, V.; Grassi, R.; Fusco, R.; Palaia, R.; Delrio, P.; Carrafiello, G.; Azoulay, D.; Petrillo, A.; Curley, S.A. Radiofrequency Ablation and Microwave Ablation in Liver Tumors: An Update. *Oncologist* **2019**, *24*, e990–e1005. [[CrossRef](#)] [[PubMed](#)]
4. Granata, V.; Grassi, R.; Fusco, R.; Setola, S.V.; Belli, A.; Ottaiano, A.; Nasti, G.; La Porta, M.; Danti, G.; Cappabianca, S.; et al. Intrahepatic cholangiocarcinoma and its differential diagnosis at MRI: How radiologist should assess MR features. *Radiol. Med.* **2021**, *126*, 1584–1600. [[CrossRef](#)]
5. Ruan, S.M.; Huang, H.; Cheng, M.Q.; Lin, M.X.; Hu, H.T.; Huang, Y.; Li, M.D.; Lu, M.D.; Wang, W. Shear-wave elastography combined with contrast-enhanced ultrasound algorithm for noninvasive characterization of focal liver lesions. *Radiol. Med.* **2022**. [[CrossRef](#)]
6. Granata, V.; Fusco, R.; Avallone, A.; Catalano, O.; Piccirillo, M.; Palaia, R.; Nasti, G.; Petrillo, A.; Izzo, F. A radiologist's point of view in the presurgical and intraoperative setting of colorectal liver metastases. *Future Oncol.* **2018**, *14*, 2189–2206. [[CrossRef](#)] [[PubMed](#)]
7. Hyodo, R.; Takehara, Y.; Naganawa, S. 4D Flow MRI in the portal venous system: Imaging and analysis methods, and clinical applications. *Radiol. Med.* **2022**, *127*, 1181–1198. [[CrossRef](#)] [[PubMed](#)]
8. Granata, V.; Fusco, R.; Catalano, O.; Piccirillo, M.; De Bellis, M.; Izzo, F.; Petrillo, A. Percutaneous ablation therapy of hepatocellular carcinoma with irreversible electroporation: MRI findings. *AJR Am. J. Roentgenol.* **2015**, *204*, 1000–1007. [[CrossRef](#)]
9. Granata, V.; Fusco, R.; Catalano, O.; Avallone, A.; Palaia, R.; Botti, G.; Tatangelo, F.; Granata, F.; Cascella, M.; Izzo, F.; et al. Diagnostic accuracy of magnetic resonance, computed tomography and contrast enhanced ultrasound in radiological multimodality assessment of peribiliary liver metastases. *PLoS ONE* **2017**, *12*, e0179951. [[CrossRef](#)]
10. Terminology Committee of the International Hepato-Pancreato-Biliary Association. Terminology of liver anatomy and re-sections. *HPB* **2000**, *2*, 333–339.
11. Wakabayashi, G.; Cherqui, D.; Geller, D.A.; Abu Hilal, M.; Berardi, G.; Ciria, R.; Abe, Y.; Aoki, T.; Asbun, H.J.; Chan, A.C.Y.; et al. The Tokyo 2020 terminology of liver anatomy and resections: Updates of the Brisbane 2000 system. *J. Hepato-Biliary-Pancreat. Sci.* **2022**, *29*, 6–15. [[CrossRef](#)] [[PubMed](#)]
12. Curley, S.A.; Izzo, F.; Abdalla, I.; Vauthey, J.N. Surgical treatment of colorectal cancer metastasis. *Cancer Metastasis Rev.* **2004**, *23*, 165–182. [[CrossRef](#)]
13. Sarpel, U.; Bonavia, A.S.; Grucela, A.; Roayaie, S.; Schwartz, M.E.; Labow, D.M. Does Anatomic Versus Nonanatomic Resection Affect Recurrence and Survival in Patients Undergoing Surgery for Colorectal Liver Metastasis? *Ann. Surg. Oncol.* **2009**, *16*, 379–384. [[CrossRef](#)]
14. Kokudo, N.; Tada, K.; Seki, M.; Ohta, H.; Azekura, K.; Ueno, M.; Matsubara, T.; Takahashi, T.; Nakajima, T.; Muto, T. Anatomical major resection versus nonanatomical limited resection for liver metastases from colorectal carcinoma. *Am. J. Surg.* **2001**, *181*, 153–159. [[CrossRef](#)]
15. Hosokawa, I.; Allard, M.-A.; Mirza, D.F.; Kaiser, G.; Barroso, E.; Lapointe, R.; Laurent, C.; Ferrero, A.; Miyazaki, M.; Adam, R. Outcomes of parenchyma-preserving hepatectomy and right hepatectomy for solitary small colorectal liver metastasis: A LiverMetSurvey study. *Surgery* **2017**, *162*, 223–232. [[CrossRef](#)]
16. Alvarez, F.A.; Sanchez Claria, R.; Oggero, S.; de Santibanes, E. Parenchymal-sparing liver surgery in patients with colorectal carcinoma liver metastases. *World J. Gastrointest. Surg.* **2016**, *8*, 407–423. [[CrossRef](#)]
17. Hamady, Z.Z.; Lodge JP, A.; Welsh, F.K.; Toogood, G.J.; White, A.; John, T.; Rees, M. One-millimeter cancer-free margin is curative for colorectal liver metastases: A pro-pensity score case-match approach. *Ann. Surg.* **2014**, *259*, 543–548. [[CrossRef](#)]
18. De Haas, R.J.; Wicherts, D.A.; Flores, E.; Azoulay, D.; Castaing, D.; Adam, R. R1 resection by necessity for colorectal liver metastases: Is it still a contraindication to surgery? *Ann. Surg.* **2008**, *248*, 626–637. [[CrossRef](#)] [[PubMed](#)]
19. Ayez, N.; Lalmahomed, Z.S.; Eggermont, A.M.M.; Ijzermans, J.N.M.; de Jonge, J.; van Montfort, K.; Verhoef, C. Outcome of Microscopic Incomplete Resection (R1) of Colorectal Liver Metastases in the Era of Neoadjuvant Chemotherapy. *Ann. Surg. Oncol.* **2012**, *19*, 1618–1627. [[CrossRef](#)] [[PubMed](#)]
20. De Re, V.; Caggiari, L.; De Zorzi, M.; Repetto, O.; Zignego, A.L.; Izzo, F.; Tornesello, M.L.; Buonaguro, F.M.; Mangia, A.; Sansonno, D.; et al. Genetic Diversity of the KIR/HLA System and Susceptibility to Hepatitis C Virus-Related Diseases. *PLoS ONE* **2015**, *10*, e0117420. [[CrossRef](#)]

21. Torzilli, G.; Viganò, L.; Fontana, A.; Procopio, F.; Terrone, A.; Cimino, M.M.; Donadon, M.; Del Fabbro, D. Oncological outcome of R1 vascular margin for mass-forming cholangiocarcinoma. A single center observational cohort analysis. *HPB* **2019**, *22*, 570–577. [[CrossRef](#)] [[PubMed](#)]
22. Torzilli, G.; Garancini, M.; Donadon, M.; Cimino, M.; Procopio, F.; Montorsi, M. Intraoperative ultrasonographic detection of communicating veins between adjacent hepatic veins during hepatectomy for tumours at the hepatocaval confluence. *Br. J. Surg.* **2010**, *97*, 1867–1873. [[CrossRef](#)]
23. Knowles, S.A.; Bertens, K.A.; Croome, K.P.; Hernandez-Alejandro, R. The current role of intraoperative ultrasound during the resection of colorectal liver metastases: A retrospective cohort study. *Int. J. Surg.* **2015**, *20*, 101–106. [[CrossRef](#)] [[PubMed](#)]
24. Torzilli, G. *Ultrasound-Guided Liver Surgery: An Atlas*, 1st ed.; Springer: Milan, Italy, 2014.
25. Torzilli, G.; Procopio, F.; Costa, G. Adjuncts to hepatic resection—Ultrasound and emerging guidance systems. In *Blumgart's Surgery of the Liver, Pancreas, and Biliary Tract*, 6th ed.; Jarnagin, W.R., Ed.; Elsevier Saunders: Philadelphia, PA, USA, 2012.
26. Torzilli, G.; Donadon, M.; Marconi, M.; Botea, F.; Palmisano, A.; Del Fabbro, D.; Procopio, F.; Montorsi, M. Systematic extended right posterior sectionectomy: A safe and effective alternative to right hepatectomy. *Ann. Surg.* **2008**, *247*, 603–611. [[CrossRef](#)]
27. Torzilli, G.; Palmisano, A.; Procopio, F.; Cimino, M.; Botea, F.; Donadon, M.; Del Fabbro, D.; Montorsi, M. A new systematic small for size resection for liver tumors invading the middle hepatic vein at its caval confluence: Mini-mesohepatectomy. *Ann. Surg.* **2010**, *251*, 33–39. [[CrossRef](#)] [[PubMed](#)]
28. Capone, F.; Costantini, S.; Guerriero, E.; Calemma, R.; Napolitano, M.; Scala, S.; Izzo, F.; Castello, G. Serum cytokine levels in patients with hepatocellular carcinoma. *Eur. Cytokine Netw.* **2010**, *21*, 99–104. [[CrossRef](#)] [[PubMed](#)]
29. Viganò, L.; Costa, G.; Procopio, F.; Donadon, M.; Cimino, M.; Del Fabbro, D.; Fabbro, A.; Gatti, A.; Torzilli, G. Parenchyma-sparing liver surgery for large segment 1 tumors: Ultrasound-guided lateral and superior approaches as safe alternatives to major hepatectomy. *J. Am. Coll. Surg.* **2015**, *221*, e65–e73. [[CrossRef](#)]
30. Torzilli, G.; Procopio, F.; Viganò, L.; Costa, G.; Fontana, A.; Cimino, M.; Donadon, M.; Del Fabbro, D. The liver tunnel: Inten-tion-to-treat validation of a new type of hepatectomy. *Ann. Surg.* **2019**, *269*, 331. [[CrossRef](#)]
31. Makuchi, M.; Hasegawa, H.; Yamazaki, S.; Takayasu, K. Four new hepatectomy procedures for resection of the right hepatic vein and preservation of the inferior right hepatic vein. *Surg. Gynecol. Obstet.* **1987**, *164*, 68–72.
32. Clavien, P.-A.; Petrowsky, H.; DeOliveira, M.L.; Graf, R. Strategies for Safer Liver Surgery and Partial Liver Transplantation. *N. Engl. J. Med.* **2007**, *356*, 1545–1559. [[CrossRef](#)]
33. Narita, M.; Oussoultzoglou, E.; Ikai, I.; Bachellier, P.; Jaeck, D. Right Portal Vein Ligation Combined with In Situ Splitting Induces Rapid Left Lateral Liver Lobe Hypertrophy Enabling 2-Staged Extended Right Hepatic Resection in Small-for-Size Settings. *Ann. Surg.* **2012**, *256*, e7–e8. [[CrossRef](#)]
34. Schadde, E.; Ardiles, V.; Robles-Campos, R.; Malago, M.; Machado, M.; Hernandez-Alejandro, R.; Soubrane, O.; Schnitzbauer, A.A.; Raptis, D.; Tschauder, C.; et al. Early survival and safety of ALPPS: First report of the International ALPPS Registry. *Ann. Surg.* **2014**, *260*, 829–836. [[CrossRef](#)]
35. Cutolo, C.; De Muzio, F.; Fusco, R.; Simonetti, I.; Belli, A.; Patrone, R.; Grassi, F.; Dell'Aversana, F.; Pilone, V.; Petrillo, A.; et al. Imaging Features of Post Main Hepatectomy Complications: The Radiologist Challenging. *Diagnostics* **2022**, *12*, 1323. [[CrossRef](#)] [[PubMed](#)]
36. Granata, V.; Fusco, R.; De Muzio, F.; Cutolo, C.; Setola, S.V.; Simonetti, I.; Dell'Aversana, F.; Grassi, F.; Bruno, F.; Belli, A.; et al. Complications Risk Assessment and Imaging Findings of Thermal Ablation Treatment in Liver Cancers: What the Radiologist Should Expect. *J. Clin. Med.* **2022**, *11*, 2766. [[CrossRef](#)] [[PubMed](#)]
37. De Muzio, F.; Cutolo, C.; Dell'Aversana, F.; Grassi, F.; Ravo, L.; Ferrante, M.; Danti, G.; Flammia, F.; Simonetti, I.; Palumbo, P.; et al. Complications after Thermal Ablation of Hepatocellular Carcinoma and Liver Metastases: Imaging Findings. *Diagnostics* **2022**, *12*, 1151. [[CrossRef](#)] [[PubMed](#)]
38. Fusco, R.; Setola, S.V.; Raiano, N.; Granata, V.; Cerciello, V.; Pecori, B.; Petrillo, A. Analysis of a monocentric computed tomography dosimetric database using a radiation dose index monitoring software: Dose levels and alerts before and after the implementation of the adaptive statistical iterative reconstruction on CT images. *Radiol. Med.* **2022**, *127*, 733–742. [[CrossRef](#)]
39. Granata, V.; Fusco, R.; De Muzio, F.; Cutolo, C.; Setola, S.V.; Dell'Aversana, F.; Belli, A.; Romano, C.; Ottaviano, A.; Nasti, G.; et al. Magnetic Resonance Features of Liver Mucinous Colorectal Metastases: What the Radiologist Should Know. *J. Clin. Med.* **2022**, *11*, 2221. [[CrossRef](#)] [[PubMed](#)]
40. Cutolo, C.; Dell'Aversana, F.; Fusco, R.; Grazzini, G.; Chiti, G.; Simonetti, I.; Bruno, F.; Palumbo, P.; Pierpaoli, L.; Valeri, T.; et al. Combined Hepatocellular-Cholangiocarcinoma: What the Multidisciplinary Team Should Know. *Diagnostics* **2022**, *12*, 890. [[CrossRef](#)]
41. Acanfora, C.; Grassi, E.; Giacobbe, G.; Ferrante, M.; Granata, V.; Barile, A.; Cappabianca, S. Post-Procedural Follow-Up of the Interventional Radiology's Management of Osteoid Osteomas and Osteoblastomas. *J. Clin. Med.* **2022**, *11*, 1987. [[CrossRef](#)]
42. Granata, V.; Fusco, R.; Setola, S.V.; De Muzio, F.; Aversana, F.D.; Cutolo, C.; Faggioni, L.; Miele, V.; Izzo, F.; Petrillo, A. CT-Based Radiomics Analysis to Predict Histopathological Outcomes Following Liver Resection in Colorectal Liver Metastases. *Cancers* **2022**, *14*, 1648. [[CrossRef](#)]
43. Bruno, F.; Granata, V.; Bellisari, F.C.; Sgalambro, F.; Tommasino, E.; Palumbo, P.; Arrigoni, F.; Cozzi, D.; Grassi, F.; Brunese, M.C.; et al. Advanced Magnetic Resonance Imaging (MRI) Techniques: Technical Principles and Applications in Nanomedicine. *Cancers* **2022**, *14*, 1626. [[CrossRef](#)]

44. Granata, V.; Fusco, R.; De Muzio, F.; Cutolo, C.; Setola, S.V.; Grassi, R.; Grassi, F.; Ottaiano, A.; Nasti, G.; Tatangelo, F.; et al. Radiomics textural features by MR imaging to assess clinical outcomes following liver resection in colorectal liver metastases. *Radiol. Med.* **2022**, *127*, 461–470. [CrossRef] [PubMed]
45. Granata, V.; Fusco, R.; De Muzio, F.; Cutolo, C.; Setola, S.V.; Dell’Aversana, F.; Ottaiano, A.; Nasti, G.; Grassi, R.; Pilone, V.; et al. EOB-MR Based Radiomics Analysis to Assess Clinical Outcomes following Liver Resection in Colorectal Liver Metastases. *Cancers* **2022**, *14*, 1239. [CrossRef] [PubMed]
46. Granata, V.; Fusco, R.; De Muzio, F.; Cutolo, C.; Setola, S.V.; Aversana, F.D.; Ottaiano, A.; Avallone, A.; Nasti, G.; Grassi, F.; et al. Contrast MR-Based Radiomics and Machine Learning Analysis to Assess Clinical Outcomes following Liver Resection in Colorectal Liver Metastases: A Preliminary Study. *Cancers* **2022**, *14*, 1110. [CrossRef]
47. Granata, V.; Fusco, R.; Setola, S.V.; Simonetti, I.; Cozzi, D.; Grazzini, G.; Grassi, F.; Belli, A.; Miele, V.; Izzo, F.; et al. An update on radiomics techniques in primary liver cancers. *Infect. Agents Cancer* **2022**, *17*, 6. [CrossRef] [PubMed]
48. De Muzio, F.; Cutolo, C.; Granata, V.; Fusco, R.; Ravo, L.; Maggiarelli, N.; Brunese, M.C.; Grassi, R.; Grassi, F.; Bruno, F.; et al. CT study protocol optimization in acute non-traumatic abdominal settings. *Eur. Rev. Med. Pharmacol. Sci.* **2022**, *26*, 860–878. [CrossRef] [PubMed]
49. Park, S.H.; Kim, Y.S.; Choi, J. Dosimetric analysis of the effects of a temporary tissue expander on the radiotherapy technique. *Radiol. Med.* **2020**, *126*, 437–444. [CrossRef] [PubMed]
50. Bozkurt, M.; Eldem, G.; Bozbulut, U.B.; Bozkurt, M.F.; Kılıçkap, S.; Peynircioğlu, B.; Çil, B.; Ergün, E.L.; Volkan-Salancı, B. Factors affecting the response to Y-90 microsphere therapy in the cholangiocarcinoma patients. *Radiol. Med.* **2020**, *126*, 323–333. [CrossRef]
51. Patrone, R.; Izzo, F.; Palaia, R.; Granata, V.; Nasti, G.; Ottaiano, A.; Pasta, G.; Belli, A. Minimally invasive surgical treatment of intrahepatic cholangiocarcinoma: A systematic review. *World J. Gastrointest. Oncol.* **2021**, *13*, 2203–2215. [CrossRef]
52. Granata, V.; Fusco, R.; Bicchierai, G.; Cozzi, D.; Grazzini, G.; Danti, G.; De Muzio, F.; Maggiarelli, N.; Smorchkova, O.; D’Elia, M.; et al. Diagnostic protocols in oncology: Workup and treatment planning. Part 1: The optimization of CT protocol. *Eur. Rev. Med. Pharmacol. Sci.* **2021**, *25*, 6972–6994. [CrossRef]
53. Merlotti, A.; Bruni, A.; Borghetti, P.; Ramella, S.; Scotti, V.; Trovò, M.; Chiari, R.; Lohr, F.; Ricardi, U.; Bria, E.; et al. Sequential chemo-hypofractionated RT versus concurrent standard CRT for locally advanced NSCLC: GRADE recommendation by the Italian Association of Radiotherapy and Clinical Oncology (AIRO). *Radiol. Med.* **2021**, *126*, 1117–1128. [CrossRef] [PubMed]
54. Wei, J.; Cheng, J.; Gu, D.; Chai, F.; Hong, N.; Wang, Y.; Tian, J. Deep learning-based radiomics predicts response to chemotherapy in colorectal liver metastases. *Med. Phys.* **2021**, *48*, 513–522. [CrossRef] [PubMed]
55. Giurazza, F.; Cionfoli, N.; Paladini, A.; Vallone, M.; Corvino, F.; Teodoli, L.; Moramarco, L.; Quaretti, P.; Catalano, C.; Niola, R.; et al. PHIL® (precipitating hydrophobic injectable liquid): Retrospective multicenter experience on 178 patients in peripheral embolizations. *Radiol. Med.* **2022**, *127*, 1303–1312. [CrossRef] [PubMed]
56. Falcinelli, L.; Mendichi, M.; Chierchini, S.; Tenti, M.V.; Bellavita, R.; Saldi, S.; Ingrosso, G.; Reggioli, V.; Bini, V.; Aristei, C. Pulmonary function in stereotactic body radiotherapy with helical tomotherapy for primary and metastatic lung lesions. *Radiol. Med.* **2020**, *126*, 163–169. [CrossRef] [PubMed]
57. Arslan, A.; Aktas, E.; Sengul, B.; Tekin, B. Dosimetric evaluation of left ventricle and left anterior descending artery in left breast radiotherapy. *Radiol. Med.* **2021**, *126*, 14–21. [CrossRef]
58. Barra, S.; Guarnieri, A.; Bastia, M.B.D.M.E.; Marcenaro, M.; Tornari, E.; Belgioia, L.; Magrini, S.M.; Ricardi, U.; Corvò, R. Short fractionation radiotherapy for early prostate cancer in the time of COVID-19: Long-term excellent outcomes from a multicenter Italian trial suggest a larger adoption in clinical practice. *Radiol. Med.* **2021**, *126*, 142–146. [CrossRef]
59. Cellini, F.; Di Franco, R.; Manfrida, S.; Borzillo, V.; Maranzano, E.; Pergolizzi, S.; Morganti, A.G.; Fusco, V.; Deodato, F.; Santarelli, M.; et al. Palliative radiotherapy indications during the COVID-19 pandemic and in future complex logistic settings: The NORMALITY model. *Radiol. Med.* **2021**, *126*, 1619–1656. [CrossRef]
60. Lancellotta, V.; Del Regno, L.; Di Stefani, A.; Fionda, B.; Marazzi, F.; Rossi, E.; Balducci, M.; Pampena, R.; Morganti, A.G.; Mangoni, M.; et al. The role of stereotactic radiotherapy in addition to immunotherapy in the management of melanoma brain metastases: Results of a systematic review. *Radiol. Med.* **2022**, *127*, 773–783. [CrossRef]
61. Ahmed, M.; Solbiati, L.; Brace, C.L.; Breen, D.J.; Callstrom, M.R.; Charboneau, J.W.; Chen, M.-H.; Choi, B.I.; de Baère, T.; Dodd, G.D.; et al. Image-Guided Tumor Ablation: Standardization of Terminology and Reporting Criteria—A 10-Year Update. *J. Vasc. Interv. Radiol.* **2014**, *25*, 1691–1705.e4. [CrossRef]
62. Available online: <https://www.assessurgery.com/clavien-dindo-classification/> (accessed on 17 September 2022).
63. Arrigoni, F.; Bianchi, G.; Formiconi, F.; Palumbo, P.; Zugaro, L.; Gravina, G.L.; Barile, A.; Masciocchi, C. CT-guided cryo-ablation for management of bone metastases: A single center experience and review of the literature. *Radiol. Med.* **2022**, *127*, 199–205. [CrossRef]
64. Hewitt, D.B.; Pawlik, T.M.; Cloyd, J.M. Who Will Benefit? Using Radiomics to Predict Response to Oxaliplatin-Based Chemotherapy in Patients with Colorectal Liver Metastases. *Ann. Surg. Oncol.* **2021**, *28*, 2931–2933. [CrossRef]
65. Barile, A.; Bruno, F.; Arrigoni, F.; Splendiani, A.; Di Cesare, E.; Zappia, M.; Guglielmi, G.; Masciocchi, C. Emergency and Trauma of the Ankle. *Semin. Musculoskelet. Radiol.* **2017**, *21*, 282–289. [CrossRef] [PubMed]
66. Hussein, M.A.M.; Cafarelli, F.P.; Paparella, M.T.; Rennie, W.J.; Guglielmi, G. Phosphaturic mesenchymal tumors: Radiological aspects and suggested imaging pathway. *Radiol. Med.* **2021**, *126*, 1609–1618. [CrossRef]

67. Danti, G.; Flammia, F.; Matteuzzi, B.; Cozzi, D.; Berti, V.; Grazzini, G.; Pradella, S.; Recchia, L.; Brunese, L.; Miele, V. Gastrointestinal neuroendocrine neoplasms (GI-NENs): Hot topics in morphological, functional, and prognostic imaging. *Radiol. Med.* **2021**, *126*, 1497–1507. [CrossRef] [PubMed]
68. Granata, V.; Bicchieri, G.; Fusco, R.; Cozzi, D.; Grazzini, G.; Danti, G.; De Muzio, F.; Maggialetti, N.; Smorchkova, O.; D’Elia, M.; et al. Diagnostic protocols in oncology: Workup and treatment planning. Part 2: Abbreviated MR protocol. *Eur. Rev. Med. Pharmacol. Sci.* **2021**, *25*, 6499–6528. [CrossRef] [PubMed]
69. Petralia, G.; Zugni, F.; Summers, P.E.; Colombo, A.; Pricolo, P.; Grazioli, L.; Colagrande, S.; Giovagnoni, A.; Padhani, A.R. On behalf of the Italian Working Group on Magnetic Resonance Whole-body magnetic resonance imaging (WB-MRI) for cancer screening: Recommendations for use. *Radiol. Med.* **2021**, *126*, 1434–1450. [CrossRef] [PubMed]
70. Granata, V.; Faggioni, L.; Grassi, R.; Fusco, R.; Reginelli, A.; Rega, D.; Maggialetti, N.; Buccicardi, D.; Frittoli, B.; Rengo, M.; et al. Structured reporting of computed tomography in the staging of colon cancer: A Delphi consensus proposal. *Radiol. Med.* **2022**, *127*, 21–29. [CrossRef]
71. Granata, V.; Grassi, R.; Fusco, R.; Belli, A.; Cutolo, C.; Pradella, S.; Grazzini, G.; La Porta, M.; Brunese, M.C.; De Muzio, F.; et al. Diagnostic evaluation and ablation treatments assessment in hepatocellular carcinoma. *Infect. Agents Cancer* **2021**, *16*, 53. [CrossRef]
72. Granata, V.; Grassi, R.; Fusco, R.; Belli, A.; Palaia, R.; Carrafiello, G.; Miele, V.; Grassi, R.; Petrillo, A.; Izzo, F. Local ablation of pancreatic tumors: State of the art and future perspectives. *World J. Gastroenterol.* **2021**, *27*, 3413–3428. [CrossRef]
73. Granata, V.; Fusco, R.; Barretta, M.L.; Picone, C.; Avallone, A.; Belli, A.; Patrone, R.; Ferrante, M.; Cozzi, D.; Grassi, R.; et al. Radiomics in hepatic metastasis by colorectal cancer. *Infect. Agents Cancer* **2021**, *16*, 39. [CrossRef]
74. Granata, V.; Fusco, R.; Salati, S.; Petrillo, A.; Di Bernardo, E.; Grassi, R.; Palaia, R.; Danti, G.; La Porta, M.; Cadossi, M.; et al. A Systematic Review about Imaging and Histopathological Findings for Detecting and Evaluating Electroporation Based Treatments Response. *Int. J. Environ. Res. Public Health* **2021**, *18*, 5592. [CrossRef]
75. Fusco, R.; Granata, V.; Sansone, M.; Rega, D.; Delrio, P.; Tatangelo, F.; Romano, C.; Avallone, A.; Pupo, D.; Giordano, M.; et al. Validation of the standardized index of shape tool to analyze DCE-MRI data in the assessment of neo-adjuvant therapy in locally advanced rectal cancer. *Radiol. Med.* **2021**, *126*, 1044–1054. [CrossRef] [PubMed]
76. Colombo, E.; Fick, T.; Esposito, G.; Germans, M.; Regli, L.; van Doormaal, T. Segmentation techniques of brain arteriovenous malformations for 3D visualization: A systematic review. *Radiol. Med.* **2022**, *127*, 1333–1341. [CrossRef] [PubMed]
77. Granata, V.; Grassi, R.; Fusco, R.; Setola, S.; Belli, A.; Piccirillo, M.; Pradella, S.; Giordano, M.; Cappabianca, S.; Brunese, L.; et al. Abbreviated MRI Protocol for the Assessment of Ablated Area in HCC Patients. *Int. J. Environ. Res. Public Health* **2021**, *18*, 3598. [CrossRef] [PubMed]
78. Patrone, R.; Granata, V.; Belli, A.; Palaia, R.; Albino, V.; Piccirillo, M.; Fusco, R.; Tatangelo, F.; Nasti, G.; Avallone, A.; et al. The safety and efficacy of Glubran 2 as biliostatic agent in liver resection. *Infect. Agents Cancer* **2021**, *16*, 19. [CrossRef] [PubMed]
79. Fusco, R.; Granata, V.; Mazzei, M.A.; Di Meglio, N.; Del Roscio, D.; Moroni, C.; Monti, R.; Cappabianca, C.; Picone, C.; Neri, E.; et al. Quantitative imaging decision support (QIDS™) tool consistency evaluation and radiomic analysis by means of 594 metrics in lung carcinoma on chest CT scan. *Cancer Control* **2021**, *28*, 1073274820985786. [CrossRef]
80. Granata, V.; Fusco, R.; Avallone, A.; De Stefano, A.; Ottaiano, A.; Sbordone, C.; Brunese, L.; Izzo, F.; Petrillo, A. Radiomics-Derived Data by Contrast Enhanced Magnetic Resonance in RAS Mutations Detection in Colorectal Liver Metastases. *Cancers* **2021**, *13*, 453. [CrossRef] [PubMed]
81. Granata, V.; Grassi, R.; Fusco, R.; Setola, S.V.; Palaia, R.; Belli, A.; Miele, V.; Brunese, L.; Grassi, R.; Petrillo, A.; et al. Assessment of Ablation Therapy in Pancreatic Cancer: The Radiologist’s Challenge. *Front. Oncol.* **2020**, *10*, 560952. [CrossRef]
82. Nakamura, Y.; Higaki, T.; Honda, Y.; Tatsugami, F.; Tani, C.; Fukumoto, W.; Narita, K.; Kondo, S.; Akagi, M.; Awai, K. Advanced CT techniques for assessing hepatocellular carcinoma. *Radiol. Med.* **2021**, *126*, 925–935. [CrossRef]
83. Granata, V.; Fusco, R.; Avallone, A.; Cassata, A.; Palaia, R.; Delrio, P.; Grassi, R.; Tatangelo, F.; Grazzini, G.; Izzo, F.; et al. Abbreviated MRI protocol for colorectal liver metastases: How the radiologist could work in pre surgical setting. *PLoS ONE* **2020**, *15*, e0241431. [CrossRef]
84. Alvaro, D.; Hassan, C.; Cardinale, V.; Carpino, G.; Fabris, L.; Gringeri, E.; Granata, V.; Mutignani, M.; Morement, H.; Giulianite, F.; et al. Italian Clinical Practice Guidelines on Cholangiocarcinoma—Part II: Treatment. *Dig. Liver Dis.* **2020**, *52*, 1430–1442. [CrossRef]
85. Alvaro, D.; Hassan, C.; Cardinale, V.; Carpino, G.; Fabris, L.; Gringeri, E.; Granata, V.; Mutignani, M.; Morement, H.; Giulianite, F.; et al. Italian Clinical Practice Guidelines on Cholangiocarcinoma—Part I: Classification, diagnosis and staging. *Dig. Liver Dis.* **2020**, *52*, 1282–1293. [CrossRef] [PubMed]
86. Granata, V.; Fusco, R.; Amato, D.M.; Albino, V.; Patrone, R.; Izzo, F.; Petrillo, A. Beyond the Vascular Profile: Conventional DWI, IVIM and Kurtosis in the Assessment of Hepatocellular Carcinoma. *Eur. Rev. Med. Pharmacol. Sci.* **2020**, *24*, 7284–7293. [CrossRef] [PubMed]
87. Granata, V.; Fusco, R.; Maio, F.; Avallone, A.; Nasti, G.; Palaia, R.; Albino, V.; Grassi, R.; Izzo, F.; Petrillo, A. Qualitative assessment of EOB-GD-DTPA and Gd-BT-DO3A MR contrast studies in HCC patients and colorectal liver metastases. *Infect. Agents Cancer* **2019**, *14*, 40. [CrossRef] [PubMed]
88. Granata, V.; Fusco, R.; Setola, S.V.; Castelguidone, E.D.L.D.; Camera, L.; Tafuto, S.; Avallone, A.; Belli, A.; Incollingo, P.; Palaia, R.; et al. The multidisciplinary team for gastroenteropancreatic neuroendocrine tumours: The radiologist’s challenge. *Radiol. Oncol.* **2019**, *53*, 373–387. [CrossRef]

89. Argalia, G.; Tarantino, G.; Ventura, C.; Campioni, D.; Tagliati, C.; Guardati, P.; Kostandini, A.; Marzoni, M.; Giuseppetti, G.M.; Giovagnoni, A. Shear wave elastography and transient elastography in HCV patients after direct-acting antivirals. *Radiol. Med.* **2021**, *126*, 894–899. [[CrossRef](#)]
90. Polesel, J.; Talamini, R.; Montella, M.; Maso, L.D.; Crovatto, M.; Parpinel, M.; Izzo, F.; Tommasi, L.G.; Serraino, D.; La Vecchia, C.; et al. Nutrients intake and the risk of hepatocellular carcinoma in Italy. *Eur. J. Cancer* **2007**, *43*, 2381–2387. [[CrossRef](#)]
91. Cicero, G.; Mazzuotti, S.; Silipigni, S.; Blandino, A.; Cantisani, V.; Pergolizzi, S.; D’Angelo, T.; Stagno, A.; Maimone, S.; Squadrato, G.; et al. Dual-energy CT quantification of fractional extracellular space in cirrhotic patients: Comparison between early and delayed equilibrium phases and correlation with oesophageal varices. *Radiol. Med.* **2021**, *126*, 761–767. [[CrossRef](#)]
92. Granata, V.; Fusco, R.; Castelguidone, E.D.L.D.; Avallone, A.; Palaia, R.; Delrio, P.; Tatangelo, F.; Botti, G.; Grassi, R.; Izzo, F.; et al. Diagnostic performance of gadoxetic acid-enhanced liver MRI versus multidetector CT in the assessment of colorectal liver metastases compared to hepatic resection. *BMC Gastroenterol.* **2019**, *19*, 129. [[CrossRef](#)]
93. Stefanini, M.; Simonetti, G. Interventional Magnetic Resonance Imaging Suite (IMRIS): How to build and how to use. *Radiol. Med.* **2022**, *127*, 1063–1067. [[CrossRef](#)]
94. Granata, V.; Fusco, R.; Avallone, A.; Catalano, O.; Filice, F.; Leongito, M.; Palaia, R.; Izzo, F.; Petrillo, A. Major and ancillary magnetic resonance features of LI-RADS to assess HCC: An overview and update. *Infect. Agents Cancer* **2017**, *12*, 23. [[CrossRef](#)] [[PubMed](#)]
95. Petrillo, A.; Fusco, R.; Granata, V.; Filice, S.; Sansone, M.; Rega, D.; Delrio, P.; Bianco, F.; Romano, G.M.; Tatangelo, F.; et al. Assessing response to neo-adjuvant therapy in locally advanced rectal cancer using Intra-voxel Incoherent Motion modelling by DWI data and Standardized Index of Shape from DCE-MRI. *Ther. Adv. Med. Oncol.* **2018**, *10*, 1758835918809875. [[CrossRef](#)] [[PubMed](#)]
96. Fusco, R.; Sansone, M.; Granata, V.; Grimm, R.; Pace, U.; Delrio, P.; Tatangelo, F.; Botti, G.; Avallone, A.; Pecori, B.; et al. Diffusion and perfusion MR parameters to assess preoperative short-course radiotherapy response in locally advanced rectal cancer: A comparative explorative study among Standardized Index of Shape by DCE-MRI, intravoxel incoherent motion- and diffusion kurtosis imaging-derived parameters. *Abdom. Imaging* **2019**, *44*, 3683–3700. [[CrossRef](#)]
97. Granata, V.; Fusco, R.; Filice, S.; Catalano, O.; Piccirillo, M.; Palaia, R.; Izzo, F.; Petrillo, A. The current role and future perspectives of functional parameters by diffusion weighted imaging in the assessment of histologic grade of HCC. *Infect. Agents Cancer* **2018**, *13*, 23. [[CrossRef](#)] [[PubMed](#)]
98. Rega, D.; Pace, U.; Scala, D.; Chiodini, P.; Granata, V.; Bucci, A.F.; Pecori, B.; Delrio, P. Treatment of splenic flexure colon cancer: A comparison of three different surgical procedures: Experience of a high volume cancer center. *Sci. Rep.* **2019**, *9*, 10953. [[CrossRef](#)]
99. Granata, V.; Fusco, R.; Avallone, A.; Filice, F.; Tatangelo, F.; Piccirillo, M.; Grassi, R.; Izzo, F.; Petrillo, A. Critical analysis of the major and ancillary imaging features of LI-RADS on 127 proven HCCs evaluated with functional and morphological MRI: Lights and shadows. *Oncotarget* **2017**, *8*, 51224–51237. [[CrossRef](#)]
100. Petrillo, A.; Fusco, R.; Petrillo, M.; Granata, V.; Delrio, P.; Bianco, F.; Pecori, B.; Botti, G.; Tatangelo, F.; Caracò, C.; et al. Standardized Index of Shape (DCE-MRI) and Standardized Uptake Value (PET/CT): Two quantitative approaches to discriminate chemo-radiotherapy locally advanced rectal cancer responders under a functional profile. *Oncotarget* **2017**, *8*, 8143–8153. [[CrossRef](#)]
101. Granata, V.; Fusco, R.; Catalano, O.; Setola, S.V.; Castelguidone, E.D.L.D.; Piccirillo, M.; Palaia, R.; Grassi, R.; Granata, F.; Izzo, F.; et al. Multidetector computer tomography in the pancreatic adenocarcinoma assessment: An update. *Infect. Agents Cancer* **2016**, *11*, 57. [[CrossRef](#)]
102. Ruffino, M.A.; Fronda, M.; Bergamasco, L.; Natrella, M.; Fanelli, G.; Bellosta, R.; Pegorer, M.; Attisani, L.; Ruggiero, M.; Malfa, P.; et al. Prognostic risk factors for loss of patency after femoropopliteal bailout stenting with dual-component stent: Results from the TIGRIS Italian Multicenter Registry. *Radiol. Med.* **2021**, *126*, 1129–1137. [[CrossRef](#)]
103. Giurazza, F.; Contegiacomo, A.; Calandri, M.; Mosconi, C.; Modestino, F.; Corvino, F.; Scrofani, A.R.; Marra, P.; Coniglio, G.; Failla, G.; et al. IVC filter retrieval: A multicenter proposal of two score systems to predict application of complex technique and procedural outcome. *Radiol. Med.* **2021**, *126*, 1007–1016. [[CrossRef](#)]
104. Fushimi, Y.; Yoshida, K.; Okawa, M.; Maki, T.; Nakajima, S.; Sakata, A.; Okuchi, S.; Hinoda, T.; Kanagaki, M.; Nakamoto, Y. Vessel wall MR imaging in neuroradiology. *Radiol. Med.* **2022**, *127*, 1032–1045. [[CrossRef](#)]
105. Granata, V.; Simonetti, I.; Fusco, R.; Setola, S.V.; Izzo, F.; Scarpato, L.; Vanella, V.; Festino, L.; Simeone, E.; Ascierto, P.A.; et al. Management of cutaneous melanoma: Radiologists challenging and risk assessment. *Radiol. Med.* **2022**, *127*, 899–911. [[CrossRef](#)] [[PubMed](#)]
106. Cirillo, L.; Rustici, A.; Toni, F.; Zoli, M.; Bartiromo, F.; Gramegna, L.L.; Cicala, D.; Tonon, C.; Caranci, F.; Lodi, R. Vessel Wall MRI: Clinical implementation in cerebrovascular disorders—Technical aspects. *Radiol. Med.* **2022**, *127*, 645–651. [[CrossRef](#)]
107. Renzulli, M.; Brandi, N.; Argalia, G.; Brocchi, S.; Farolfi, A.; Fanti, S.; Golfieri, R. Morphological, dynamic and functional characteristics of liver pseudolesions and benign lesions. *Radiol. Med.* **2022**, *127*, 129–144. [[CrossRef](#)]
108. Li, N.; Wakim, J.; Koethe, Y.; Huber, T.; Schenning, R.; Gade, T.P.; Hunt, S.J.; Park, B.J. Multicenter assessment of augmented reality registration methods for image-guided interventions. *Radiol. Med.* **2022**, *127*, 857–865. [[CrossRef](#)] [[PubMed](#)]
109. Ledda, R.E.; Silva, M.; McMichael, N.; Sartorio, C.; Branchi, C.; Milanese, G.; Nayak, S.M.; Sverzellati, N. The diagnostic value of grey-scale inversion technique in chest radiography. *Radiol. Med.* **2022**, *127*, 294–304. [[CrossRef](#)]

110. Bianchi, A.; Mazzoni, L.N.; Busoni, S.; Pinna, N.; Albanesi, M.; Cavigli, E.; Cozzi, D.; Poggesi, A.; Miele, V.; Fainardi, E.; et al. Assessment of cerebrovascular disease with computed tomography in COVID-19 patients: Correlation of a novel specific visual score with increased mortality risk. *Radiol. Med.* **2021**, *126*, 570–576. [CrossRef] [PubMed]
111. Cartocci, G.; Colaiacomo, M.C.; Lanciotti, S.; Andreoli, C.; De Cicco, M.L.; Brachetti, G.; Pugliese, S.; Capoccia, L.; Tortora, A.; Scala, A.; et al. Correction to: Chest CT for early detection and management of coronavirus disease (COVID-19): A report of 314 patients admitted to Emergency Department with suspected pneumonia. *Radiol. Med.* **2021**, *126*, 642. [CrossRef]
112. Masci, G.M.; Iafrate, F.; Ciccarelli, F.; Pambianchi, G.; Panebianco, V.; Pasculli, P.; Ciardi, M.R.; Mastroianni, C.M.; Ricci, P.; Catalano, C.; et al. Tocilizumab effects in COVID-19 pneumonia: Role of CT texture analysis in quantitative assessment of response to therapy. *Radiol. Med.* **2021**, *126*, 1170–1180. [CrossRef]
113. Francolini, G.; Desideri, I.; Stocchi, G.; Ciccone, L.P.; Salvestrini, V.; Garlatti, P.; Aquilano, M.; Greto, D.; Bonomo, P.; Meattini, I.; et al. Impact of COVID-19 on workload burden of a complex radiotherapy facility. *Radiol. Med.* **2021**, *126*, 717–721. [CrossRef]
114. Pignata, S.; Gallo, C.; Daniele, B.; Elba, S.; Giorgio, A.; Capuano, G.; Adinolfi, L.E.; De Sio, I.; Izzo, F.; Farinati, F.; et al. Characteristics at presentation and outcome of hepatocellular carcinoma (HCC) in the elderly. A study of the Cancer of the Liver Italian Program (CLIP). *Crit. Rev. Oncol.* **2006**, *59*, 243–249. [CrossRef]
115. Perillo, T.; Paolella, C.; Perrotta, G.; Serino, A.; Caranci, F.; Manto, A. Reversible cerebral vasoconstriction syndrome: Review of neuroimaging findings. *Radiol. Med.* **2022**, *127*, 981–990. [CrossRef]
116. Caruso, D.; Polici, M.; Rinzivillo, M.; Zerunian, M.; Nacci, I.; Marasco, M.; Magi, L.; Tarallo, M.; Gargiulo, S.; Iannicelli, E.; et al. CT-based radiomics for prediction of therapeutic response to Everolimus in metastatic neuroendocrine tumors. *Radiol. Med.* **2022**, *127*, 691–701. [CrossRef] [PubMed]
117. Han, D.; Yu, N.; Yu, Y.; He, T.; Duan, X. Performance of CT radiomics in predicting the overall survival of patients with stage III clear cell renal carcinoma after radical nephrectomy. *Radiol. Med.* **2022**, *127*, 837–847. [CrossRef] [PubMed]
118. Granata, V.; Fusco, R.; Setola, S.; Galdiero, R.; Picone, C.; Izzo, F.; D’Aniello, R.; Miele, V.; Grassi, R.; Grassi, R.; et al. Lymphadenopathy after BNT162b2 COVID-19 Vaccine: Preliminary Ultrasound Findings. *Biology* **2021**, *10*, 214. [CrossRef]
119. Masci, G.M.; Ciccarelli, F.; Mattei, F.I.; Grasso, D.; Accarpio, F.; Catalano, C.; Laghi, A.; Sammartino, P.; Iafrate, F. Role of CT texture analysis for predicting peritoneal metastases in patients with gastric cancer. *Radiol. Med.* **2022**, *127*, 251–258. [CrossRef] [PubMed]
120. Izzo, F.; Piccirillo, M.; Albino, V.; Palaia, R.; Belli, A.; Granata, V.; Setola, S.; Fusco, R.; Petrillo, A.; Orlando, R.; et al. Prospective screening increases the detection of potentially curable hepatocellular carcinoma: Results in 8900 high-risk patients. *HPB* **2013**, *15*, 985–990. [CrossRef]
121. Granata, V.; Castelguidone, E.D.L.D.; Fusco, R.; Catalano, O.; Piccirillo, M.; Palaia, R.; Izzo, F.; Gallipoli, A.D.; Petrillo, A. Irreversible electroporation of hepatocellular carcinoma: Preliminary report on the diagnostic accuracy of magnetic resonance, computer tomography, and contrast-enhanced ultrasound in evaluation of the ablated area. *Radiol. Med.* **2016**, *121*, 122–131. [CrossRef] [PubMed]
122. Fanelli, F.; Cannavale, A.; Chisci, E.; Citone, M.; Falcone, G.M.; Michelagnoli, S.; Miele, V. Direct percutaneous embolization of aneurysm sac: A safe and effective procedure to treat post-EVAR type II endoleaks. *Radiol. Med.* **2021**, *126*, 258–263. [CrossRef]
123. Battaglia, V.; Cervelli, R. Liver investigations: Updating on US technique and contrast-enhanced ultrasound (CEUS). *Eur. J. Radiol.* **2017**, *96*, 65–73. [CrossRef]
124. Faccia, M.; Garcovich, M.; Ainora, M.E.; Riccardi, L.; Pompili, M.; Gasbarrini, A.; Zocco, M.A. Contrast-Enhanced Ultrasound for Monitoring Treatment Response in Different Stages of Hepatocellular Carcinoma. *Cancers* **2022**, *14*, 481. [CrossRef]
125. Ossola, C.; Curti, M.; Calvi, M.; Tack, S.; Mazzoni, S.; Genesio, L.; Venturini, M.; Genovese, E.A. Role of ultrasound and magnetic resonance imaging in the prognosis and classification of muscle injuries in professional football players: Correlation between imaging and return to sport time. *Radiol. Med.* **2021**, *126*, 1460–1467. [CrossRef] [PubMed]
126. Güldoğan, E.S.; Ergun, O.; Türkmenoğlu, T.T.; Yılmaz, K.B.; Akdag, T.; Güneş, S.Ö.; Durmaz, H.A.; Hekimoğlu, B. The impact of TI-RADS in detecting thyroid malignancies: A prospective study. *Radiol. Med.* **2021**, *126*, 1335–1344. [CrossRef] [PubMed]
127. Celletti, I.; Fresilli, D.; De Vito, C.; Bononi, M.; Cardaccio, S.; Cozzolino, A.; Durante, C.; Grani, G.; Grimaldi, G.; Isidori, A.M.; et al. TIRADS, SRE and SWE in INDETERMINATE thyroid nodule characterization: Which has better diagnostic performance? *Radiol. Med.* **2021**, *126*, 1189–1200. [CrossRef] [PubMed]
128. Rosa, F.; Martinetti, C.; Veirana, M.A.; Attieh, A.; Trisoglio, A.; Sabattini, R.; Gandolfo, N.; Gastaldo, A. How embryology knowledge can help radiologists in the differential diagnosis of canal of Nuck pathologies. *Radiol. Med.* **2021**, *126*, 910–924. [CrossRef] [PubMed]
129. Granata, V.; Fusco, R.; Sansone, M.; Grassi, R.; Maio, F.; Palaia, R.; Tatangelo, F.; Botti, G.; Grimm, R.; Curley, S.; et al. Magnetic resonance imaging in the assessment of pancreatic cancer with quantitative parameter extraction by means of dynamic contrast-enhanced magnetic resonance imaging, diffusion kurtosis imaging and intravoxel incoherent motion diffusion-weighted imaging. *Ther. Adv. Gastroenterol.* **2020**, *13*, 1756284819885052. [CrossRef]
130. Masciocchi, C.; Sparvoli, L.; Barile, A. Diagnostic imaging of malignant cartilage tumors. *Eur. J. Radiol.* **1998**, *27* (Suppl. 1), S86–S90. [CrossRef]
131. Barile, A.; Bruno, F.; Mariani, S.; Arrigoni, F.; Reginelli, A.; De Filippo, M.; Zappia, M.; Splendiani, A.; Di Cesare, E.; Masciocchi, C. What can be seen after rotator cuff repair: A brief review of diagnostic imaging findings. *Musculoskeletal Surg.* **2017**, *101* (Suppl. 1), 3–14. [CrossRef]

132. Barile, A.; Quarchioni, S.; Bruno, F.; Ierardi, A.M.; Arrigoni, F.; Giordano, A.V.; Carducci, S.; Varrassi, M.; Carrafiello, G.; Caranci, F.; et al. Interventional radiology of the thyroid gland: Critical review and state of the art. *Gland. Surg.* **2018**, *7*, 132–146. [[CrossRef](#)]
133. Available online: <https://www.nccn.org> (accessed on 17 September 2022).
134. Available online: <https://www.aiom.it> (accessed on 17 September 2022).
135. Available online: <http://www.sirm.org> (accessed on 17 September 2022).
136. Perrone, F.; Gallo, C.; Daniele, B.; Gaeta, G.; Izzo, F.; Capuano, G.; Adinolfi, L.; Mazzanti, R.; Farinati, F.; Elba, S.; et al. Tamoxifen in the Treatment of Hepatocellular Carcinoma: 5-Year Results of the CLIP-1 Multicentre Randomised Controlled Trial. *Curr. Pharm. Des.* **2002**, *8*, 1013–1019. [[CrossRef](#)]
137. Riva, F.; Garanzini, E.M.; Casella, T.; Marchianò, A.V.; Spreatfico, C. A “blood theft” after liver transplantation: The role of interventional radiology in the management and treatment of splenic artery steal syndrome. *J. Radiol. Case Rep.* **2022**, *16*, 1–7. [[CrossRef](#)] [[PubMed](#)]
138. Arrigoni, F.; Bruno, F.; Zugaro, L.; Natella, R.; Cappabianca, S.; Russo, U.; Papapietro, V.R.; Splendiani, A.; Di Cesare, E.; Masciocchi, C.; et al. Developments in the management of bone metastases with interventional radiology. *Acta Biomed.* **2018**, *89*, 166–174. [[CrossRef](#)]
139. Serai, S.D.; Elsingergy, M.M.; Hartung, E.A.; Otero, H.J. Liver and spleen volume and stiffness in patients post-Fontan procedure and patients with ARPKD compared to normal controls. *Clin. Imaging* **2022**, *89*, 147–154. [[CrossRef](#)] [[PubMed](#)]
140. Arrigoni, F.; Barile, A.; Zugaro, L.; Fascati, E.; Zappia, M.; Brunese, L.; Masciocchi, C. CT-guided radiofrequency ablation of spinal osteoblastoma: Treatment and long-term follow-up. *Int. J. Hyperth.* **2018**, *34*, 321–327. [[CrossRef](#)]
141. De Filippo, M.; Puglisi, S.; D’Amuri, F.; Gentili, F.; Paladini, I.; Carrafiello, G.; Maestroni, U.; Del Rio, P.; Ziglioli, F.; Pagnini, F. CT-guided percutaneous drainage of abdominopelvic collections: A pictorial essay. *Radiol. Med.* **2021**, *126*, 1561–1570. [[CrossRef](#)]
142. Cannataci, C.; Cimo, B.; Mamone, G.; Tuzzolino, F.; D’Amico, M.; Cortis, K.; Maruzzelli, L.; Miraglia, R. Portal vein puncture-related complications during transjugular intrahepatic portosystemic shunt creation: Colapinto needle set vs. Rösch-Uchida needle set. *Radiol. Med.* **2021**, *126*, 1487–1495. [[CrossRef](#)] [[PubMed](#)]
143. Mahnken, A.H.; Boullosa Seoane, E.; Cannavale, A.; de Haan, M.W.; Dezman, R.; Kloeckner, R.; O’Sullivan, G.; Ryan, A.; Tsoumakidou, G. CIRSE Clinical Practice Manual. *Cardiovasc. Intervent. Radiol.* **2021**, *44*, 1323–1353.
144. Laurelli, G.; Falcone, F.; Gallo, M.S.; Scala, F.; Losito, S.; Granata, V.; Casella, M.; Greggi, S. Long-Term Oncologic and Reproductive Outcomes in Young Women with Early Endometrial Cancer Conservatively Treated: A Prospective Study and Literature Update. *Int. J. Gynecol. Cancer* **2016**, *26*, 1650–1657. [[CrossRef](#)]
145. De Cecco, C.N.; Buffa, V.; Fedeli, S.; Luzietti, M.; Vallone, A.; Ruopoli, R.; Miele, V.; Rengo, M.; MauriziEnrici, M.; Fina, P.; et al. Preliminary experience with abdominal dual-energy CT (DECT): True versus virtual nonenhanced images of the liver. *Radiol. Med.* **2010**, *115*, 1258–1266. [[CrossRef](#)]
146. di Giacomo, V.; Trinci, M.; van der Byl, G.; Catania, V.D.; Calisti, A.; Miele, V. Ultrasound in newborns and children suffering from non-traumatic acute abdominal pain: Imaging with clinical and surgical correlation. *J. Ultrasound* **2014**, *18*, 385–393. [[CrossRef](#)]
147. Izzo, F.; Palaia, R.; Albino, V.; Amore, A.; di Giacomo, R.; Piccirillo, M.; Leongito, M.; Nasto, A.; Granata, V.; Petrillo, A.; et al. Hepato-cellular carcinoma and liver metastases: Clinical data on a new dual-lumen catheter kit for surgical sealant infusion to prevent perihepatic bleeding and dissemination of cancer cells following biopsy and loco-regional treatments. *Infect. Agent Cancer* **2015**, *10*, 11. [[CrossRef](#)] [[PubMed](#)]
148. Rahbari, N.N.; Garden, O.J.; Padbury, R.; Maddern, G.; Koch, M.; Hugh, T.J.; Fan, S.T.; Nimura, Y.; Figueras, J.; Vauthhey, J.-N.; et al. Post-hepatectomy haemorrhage: A definition and grading by the International Study Group of Liver Surgery (ISGLS). *HPB* **2011**, *13*, 528–535. [[CrossRef](#)] [[PubMed](#)]
149. Lubner, M.; Menias, C.; Rucker, C.; Bhalla, S.; Peterson, C.M.; Wang, L.; Gratz, B. Blood in the Belly: CT Findings of Hemoperitoneum. *Radiographics* **2007**, *27*, 109–125. [[CrossRef](#)]
150. Ilyas, M.; Bashir, M.; Robbani, I.; Rasool, S.R.; Sher, F.A.; Hamid, I. Sentinel clot sign in hemoperitoneum. *Abdom. Imaging* **2019**, *44*, 1955–1956. [[CrossRef](#)]
151. Fusco, R.; Sansone, M.; Filice, S.; Granata, V.; Catalano, O.; Amato, D.M.; Di Bonito, M.; D’Aiuto, M.; Capasso, I.; Rinaldo, M.; et al. Integration of DCE-MRI and DW-MRI Quantitative Parameters for Breast Lesion Classification. *BioMed Res. Int.* **2015**, *2015*, 237863. [[CrossRef](#)]
152. Byun, J.; Kim, K.W.; Lee, J.; Kwon, H.-J.; Kwon, J.H.; Song, G.-W.; Lee, S.-G. The role of multiphase CT in patients with acute postoperative bleeding after liver transplantation. *Abdom. Imaging* **2019**, *45*, 141–152. [[CrossRef](#)] [[PubMed](#)]
153. Di Domenico, S.; Rossini, A.; Petrocelli, F.; Valente, U.; Ferro, C. Recurrent acute Budd–Chiari syndrome after right hepatectomy: US color-Doppler vascular pattern and left hepatic vein stenting for treatment. *Abdom. Imaging* **2013**, *38*, 320–323. [[CrossRef](#)]
154. Yoshiya, S.; Shirabe, K.; Nakagawara, H.; Soejima, Y.; Yoshizumi, T.; Ikegami, T.; Yamashita, Y.-I.; Harimoto, N.; Nishie, A.; Yamanaka, T.; et al. Portal Vein Thrombosis After Hepatectomy. *World J. Surg.* **2014**, *38*, 1491–1497. [[CrossRef](#)] [[PubMed](#)]
155. Cohen, J.; Edelman, R.R.; Chopra, S. Portal vein thrombosis: A review. *Am. J. Med.* **1992**, *92*, 173–182. [[CrossRef](#)]
156. Witte, C.L.; Brewer, M.L.; Witte, M.H.; Pond, G.B. Protean Manifestations of Pylethrombosis. A review of thirty-four patients. *Ann. Surg.* **1985**, *202*, 191–202. [[CrossRef](#)]
157. Sheen, C.; Lamparelli, H.; Milne, A.; Green, I.; Ramage, J. Clinical features, diagnosis and outcome of acute portal vein thrombosis. *QJM* **2000**, *93*, 531–534. [[CrossRef](#)] [[PubMed](#)]

158. Sakuraba, M.; Miyamoto, S.; Nagamatsu, S.; Kayano, S.; Taji, M.; Kinoshita, T.; Kosuge, T.; Kimata, Y. Hepatic artery reconstruction following ablative surgery for hepatobiliary and pancreatic malignancies. *Eur. J. Surg. Oncol.* **2012**, *38*, 580–585. [CrossRef] [PubMed]
159. Silva, M.A.; Jambulingam, P.S.; Gunson, B.K.; Mayer, D.; Buckels, J.A.; Mirza, D.F.; Bramhall, S.R. Hepatic artery thrombosis following orthotopic liver transplantation: A 10-year experience from a single centre in the United Kingdom. *Liver Transplant.* **2006**, *12*, 146–151. [CrossRef]
160. Bhattacharjya, S.; Gunson, B.K.; Mirza, D.F.; Mayer, D.A.; Buckels, J.A.; McMaster, P.; Neuberger, J.M. Delayed Hepatic Artery Thrombosis in Adult Orthotopic Liver Transplantation—A 12-Year Experience. *Transplantation* **2001**, *71*, 1592–1596. [CrossRef]
161. Nagano, Y.; Togo, S.; Tanaka, K.; Masui, H.; Endo, I.; Sekido, H.; Nagahori, K.; Shimada, H. Risk Factors and Management of Bile Leakage after Hepatic Resection. *World J. Surg.* **2003**, *27*, 695–698. [CrossRef] [PubMed]
162. Hoeffel, C.; Azizi, L.; Lewin, M.; Laurent, V.; Aubé, C.; Arrivé, L.; Tubiana, J.-M. Normal and Pathologic Features of the Postoperative Biliary Tract at 3D MR Cholangiopancreatography and MR Imaging. *Radiographics* **2006**, *26*, 1603–1620. [CrossRef] [PubMed]
163. Castellanos, A.A.; Granados, J.F.M.; Fernandez, J.E.; Muñoz, I.G.; Tarradas, F.D.A.T. Early phase detection of bile leak after hepatobiliary surgery: Value of Gd-EOB-DTPA-enhanced MR cholangiography. *Abdom. Imaging* **2012**, *37*, 795–802. [CrossRef] [PubMed]
164. Melamud, K.; LeBedis, C.A.; Anderson, S.W.; Soto, J.A. Biliary Imaging: Multimodality Approach to Imaging of Biliary Injuries and Their Complications. *Radiographics* **2014**, *34*, 613–623. [CrossRef]
165. Thompson, C.M.; Saad, N.E.; Quazi, R.R.; Darcy, M.D.; Picus, D.D.; Menias, C.O. Management of Iatrogenic Bile Duct Injuries: Role of the Interventional Radiologist. *Radiographics* **2013**, *33*, 117–134. [CrossRef]
166. Biller, L.H.; Schrag, D. Diagnosis and Treatment of Metastatic Colorectal Cancer: A Review. *JAMA* **2021**, *325*, 669–685. [CrossRef]
167. Kopetz, S.; Chang, G.J.; Overman, M.J.; Eng, C.; Sargent, D.; Larson, D.W.; Grothey, A.; Vauthey, J.-N.; Nagorney, D.M.; McWilliams, R.R. Improved Survival in Metastatic Colorectal Cancer Is Associated With Adoption of Hepatic Resection and Improved Chemotherapy. *J. Clin. Oncol.* **2009**, *27*, 3677–3683. [CrossRef] [PubMed]
168. Tagliafico, A.S.; Campi, C.; Bianca, B.; Bortolotto, C.; Buccicardi, D.; Francesca, C.; Prost, R.; Rengo, M.; Faggioni, L. Blockchain in radiology research and clinical practice: Current trends and future directions. *Radiol. Med.* **2022**, *127*, 391–397. [CrossRef]
169. Rahbari, N.N.; Garden, O.J.; Padbury, R.; Brooke-Smith, M.; Crawford, M.; Adam, R.; Koch, M.; Makuchi, M.; Dematteo, R.P.; Christophi, C.; et al. Posthepatectomy liver failure: A definition and grading by the International Study Group of Liver Surgery (ISGLS). *Surgery* **2011**, *149*, 713–724. [CrossRef] [PubMed]
170. Chiti, G.; Grazzini, G.; Flammia, F.; Matteuzzi, B.; Tortoli, P.; Bettarini, S.; Pasqualini, E.; Granata, V.; Busoni, S.; Messerini, L.; et al. Gastroenteropancreatic neuroendocrine neoplasms (GEP-NENs): A radiomic model to predict tumor grade. *Radiol. Med.* **2022**, *127*, 928–938. [CrossRef] [PubMed]
171. Pawlik, T.M.; Scoggins, C.R.; Zorzi, D.; Abdalla, E.K.; Andres, A.; Eng, C.; Curley, S.A.; Loyer, E.M.; Muratore, A.; Mentha, G.; et al. Effect of Surgical Margin Status on Survival and Site of Recurrence After Hepatic Resection for Colorectal Metastases. *Ann. Surg.* **2005**, *241*, 715–724. [CrossRef]
172. Borghetti, P.; Branz, J.; Volpi, G.; Pancera, S.; Buraschi, R.; Bianchi, L.N.C.; Bonù, M.L.; Greco, D.; Facheris, G.; Tomasi, C.; et al. Home-based pulmonary rehabilitation in patients undergoing (chemo)radiation therapy for unresectable lung cancer: A prospective explorative study. *Radiol. Med.* **2022**, *127*, 1322–1332. [CrossRef]
173. Pawlik, T.M.; Schulick, R.D.; Choti, M.A. Expanding Criteria for Resectability of Colorectal Liver Metastases. *Oncologist* **2008**, *13*, 51–64. [CrossRef] [PubMed]
174. Aquina, C.T.; Brown, Z.J.; Beane, J.D.; Ejaz, A.; Cloyd, J.M.; Tsung, A.; Adam, M.O.; Pawlik, T.M.; Kim, A.C. Disparities in Care Access to Liver-Directed Therapy Among Medicare Beneficiaries with Colorectal Cancer Liver Metastasis. *Ann. Surg. Oncol.* **2022**, *30*, 335–344. [CrossRef] [PubMed]
175. Granata, V.; Fusco, R.; De Muzio, F.; Cutolo, C.; Setola, S.V.; Dell’Aversana, F.; Grassi, F.; Belli, A.; Silvestro, L.; Ottaiano, A.; et al. Radiomics and machine learning analysis based on magnetic resonance imaging in the assessment of liver mucinous colorectal metastases. *Radiol. Med.* **2022**, *127*, 763–772. [CrossRef]
176. Ierardi, A.M.; Stellato, E.; Pellegrino, G.; Bonelli, C.; Cellina, M.; Renzulli, M.; Biondetti, P.; Carrafiello, G. Fluid-dynamic control microcatheter used with glue: Preliminary experience on its feasibility and safety. *Radiol. Med.* **2022**, *127*, 272–276. [CrossRef]
177. Granata, V.; Fusco, R.; Catalano, O.; Filice, S.; Amato, D.M.; Nasti, G.; Avallone, A.; Izzo, F.; Petrillo, A. Early Assessment of Colorectal Cancer Patients with Liver Metastases Treated with Antiangiogenic Drugs: The Role of Intravoxel Incoherent Motion in Diffusion-Weighted Imaging. *PLoS ONE* **2015**, *10*, e0142876. [CrossRef] [PubMed]
178. Granata, V.; Fusco, R.; Setola, S.V.; Raso, M.M.; Avallone, A.; De Stefano, A.; Nasti, G.; Palaia, R.; Delrio, P.; Petrillo, A.; et al. Liver radiologic findings of chemotherapy-induced toxicity in liver colorectal metastases patients. *Eur. Rev. Med. Pharmacol. Sci.* **2019**, *23*, 9697–9706. [PubMed]
179. Intagliata, N.M.; Caldwell, S.H.; Tripodi, A. Diagnosis, Development, and Treatment of Portal Vein Thrombosis in Patients with and without Cirrhosis. *Gastroenterology* **2019**, *156*, 1582–1599.e1. [CrossRef] [PubMed]
180. Barretta, M.L.; Catalano, O.; Setola, S.V.; Granata, V.; Marone, U.; Gallipoli, A.D. Gallbladder metastasis: Spectrum of imaging findings. *Abdom. Imaging* **2011**, *36*, 729–734. [CrossRef]

181. Lopera, J.E.; Yamaguchi, S. Invited Commentary: Minimally Invasive Endovascular Management of Portal Vein Thrombosis. *Radiographics* **2022**, *42*, E169–E170. [[CrossRef](#)]
182. Ak, C.; Adalı, G.; Sayar, S.; Ağaoğlu, A.; Kulali, F.; Kahraman, R.; Özeturk, O.; Özdiç, K. Portal Vein Thrombosis Risk Factors in Liver Transplant Candidates. *Hepatol. Forum* **2022**, *3*, 88–92. [[CrossRef](#)]
183. Song, W.; Chen, Q.; Guo, D.; Jiang, C. Preoperative estimation of the survival of patients with unresectable hepatocellular carcinoma achieving complete response after conventional transcatheter arterial chemoembolization: Assessments of clinical and LI-RADS MR features. *Radiol. Med.* **2022**, *127*, 939–949. [[CrossRef](#)]
184. Iacobellis, F.; Brillantino, A.; Di Serafino, M.; Orabona, G.D.; Grassi, R.; Cappabianca, S.; Scaglione, M.; Romano, L. Economic and clinical benefits of immediate total-body CT in the diagnostic approach to polytraumatized patients: A descriptive analysis through a literature review. *Radiol. Med.* **2022**, *127*, 637–644. [[CrossRef](#)]
185. Paolucci, A.; Ierardi, A.M.; Hohenstatt, S.; Grassi, V.; Romagnoli, S.; Pignataro, L.; Trimarchi, S.; Carrafiello, G. Pre-surgical embolization of carotid body paragangliomas: Advantages of direct percutaneous approach and transitory balloon-occlusion at the origin of the external carotid artery. *Radiol. Med.* **2022**, *127*, 433–439. [[CrossRef](#)]
186. Xiong, X.; Lou, Y.; Zhou, T.; Zheng, Z.; Liu, Y.; Liu, R.; Zhang, K.; Gong, Y.; Tang, C.; Jin, Z. Case report: A case of giant accessory hepatic lobe torsion combined with left hepatic vein branch thrombosis in a child. *Front. Pediatr.* **2022**, *10*, 970876. [[CrossRef](#)]
187. Kato, H.; Asano, Y.; Ito, M.; Arakawa, S.; Shimura, M.; Koike, D.; Ochi, T.; Yasuoka, H.; Kawai, T.; Higashiguchi, T.; et al. A case of Vp4 hepatocellular carcinoma with tumor thrombosis extending into the confluence of the splenic/portal vein achieved a good prognosis with emergent hepatectomy and postoperative adjuvant therapy with lenvatinib. *World J. Surg. Oncol.* **2022**, *20*, 278. [[CrossRef](#)] [[PubMed](#)]
188. Cortellini, A.; Bozzetti, F.; Palumbo, P.; Brocco, D.; Di Marino, P.; Tinari, N.; De Tursi, M.; Agostinelli, V.; Patruno, L.; Valdesi, C.; et al. Weighing the role of skeletal muscle mass and muscle density in cancer patients receiving PD-1/PD-L1 checkpoint inhibitors: A multicenter real-life study. *Sci. Rep.* **2020**, *10*, 1456. [[CrossRef](#)]
189. Piccirillo, M.; Rinaldi, L.; Leongito, M.; Amore, A.; Crispò, A.; Granata, V.; Aprea, P.; Izzo, F. Percutaneous implant of Denver peri-toneo-venous shunt for treatment of refractory ascites: A single center retrospective study. *Eur. Rev. Med. Pharmacol. Sci.* **2017**, *21*, 3668–3673. [[PubMed](#)]
190. Alam, H.; Kim, D.; Provido, H.; Kirkpatrick, J. Portal vein thrombosis in the adult: Surgical implications in an era of dynamic imaging. *Am. Surg.* **1997**, *63*, 681–685. [[PubMed](#)]
191. Hanafy, A.S.; Abd-Elsalam, S.; Dawoud, M.M. Randomized controlled trial of rivaroxaban versus warfarin in the management of acute non-neoplastic portal vein thrombosis. *Vasc. Pharmacol.* **2019**, *113*, 86–91. [[CrossRef](#)] [[PubMed](#)]
192. Xue, Z.; Chen, M.; Zhang, X.; Wang, G.; He, X.; Wu, L.; Ma, Y. Analysis of early hepatic artery thrombosis after liver transplantation. *ANZ J. Surg.* **2018**, *88*, 172–176. [[CrossRef](#)]
193. McNaughton, D.A.; Abu-Yousef, M.M. Doppler US of the liver made simple. *Radiographics* **2011**, *31*, 161–188; Erratum in *Radiographics* **2011**, *31*, 904. [[CrossRef](#)]
194. Yoon, J.H.; Choi, S.K.; Cho, S.B.; Kim, H.J.; Ko, Y.S.; Jun, C.H. Early extrahepatic recurrence as a pivotal factor for survival after hepatocellular carcinoma resection: A 15-year observational study. *World J. Gastroenterol.* **2022**, *28*, 5351–5363. [[CrossRef](#)]
195. Xiong, Y.; Cao, P.; Lei, X.; Tang, W.; Ding, C.; Qi, S.; Chen, G. Accurate prediction of microvascular invasion occurrence and effective prognostic estimation for patients with hepatocellular carcinoma after radical surgical treatment. *World J. Surg. Oncol.* **2022**, *20*, 328. [[CrossRef](#)]
196. Granata, V.; Fusco, R.; Setola, S.V.; Picone, C.; Vallone, P.; Belli, A.; Incollingo, P.; Albino, V.; Tatangelo, F.; Izzo, F.; et al. Microvascular invasion and grading in hepatocellular carcinoma: Correlation with major and ancillary features according to LIRADS. *Abdom. Imaging* **2019**, *44*, 2788–2800. [[CrossRef](#)]
197. Masciocchi, C.; Arrigoni, F.; La Marra, A.; Mariani, S.; Zugaro, L.; Barile, A. Treatment of focal benign lesions of the bone: MRgFUS and RFA. *Br. J. Radiol.* **2016**, *89*, 20150356. [[CrossRef](#)]
198. Granata, V.; Fusco, R.; D'Alessio, V.; Giannini, A.; Venanzio Setola, S.; Belli, A.; Palaia, R.; Petrillo, A.; Izzo, F. Electroporation-based treatments in minimally invasive percutaneous, laparoscopy and endoscopy procedures for treatment of deep-seated tumors. *Eur. Rev. Med. Pharmacol. Sci.* **2021**, *25*, 3536–3545. [[CrossRef](#)]
199. Granata, V.; Fusco, R.; Risi, C.; Ottaiano, A.; Avallone, A.; De Stefano, A.; Grimm, R.; Grassi, R.; Brunese, L.; Izzo, F.; et al. Diffusion-Weighted MRI and Diffusion Kurtosis Imaging to Detect RAS Mutation in Colorectal Liver Metastasis. *Cancers* **2020**, *12*, 2420. [[CrossRef](#)]
200. Vicini, S.; Bortolotto, C.; Rengo, M.; Ballerini, D.; Bellini, D.; Carbone, I.; Preda, L.; Laghi, A.; Coppola, F.; Faggioni, L. A narrative review on current imaging applications of artificial intelligence and radiomics in oncology: Focus on the three most common cancers. *Radiol. Med.* **2022**, *127*, 819–836. [[CrossRef](#)] [[PubMed](#)]
201. Xue, K.; Liu, L.; Liu, Y.; Guo, Y.; Zhu, Y.; Zhang, M. Radiomics model based on multi-sequence MR images for predicting preoperative immunoscore in rectal cancer. *Radiol. Med.* **2022**, *127*, 702–713. [[CrossRef](#)] [[PubMed](#)]
202. Gao, W.; Wang, W.; Song, D.; Yang, C.; Zhu, K.; Zeng, M.; Rao, S.-X.; Wang, M. A predictive model integrating deep and radiomics features based on gadobenate dimeglumine-enhanced MRI for postoperative early recurrence of hepatocellular carcinoma. *Radiol. Med.* **2022**, *127*, 259–271. [[CrossRef](#)] [[PubMed](#)]
203. Scialpi, M.; Moschini, T.O.; De Filippis, G. PET/contrast-enhanced CT in oncology: “To do, or not to do, that is the question”. *Radiol. Med.* **2022**, *127*, 925–927. [[CrossRef](#)]

204. Granata, V.; Catalano, O.; Fusco, R.; Tatangelo, F.; Rega, D.; Nasti, G.; Avallone, A.; Piccirillo, M.; Izzo, F.; Petrillo, A. The target sign in colorectal liver metastases: An atypical Gd-EOB-DTPA “uptake” on the hepatobiliary phase of MR imaging. *Abdom. Imaging* **2015**, *40*, 2364–2371. [[CrossRef](#)]
205. Piccirillo, M.; Granata, V.; Albino, V.; Palaia, R.; Setola, S.V.; Petrillo, A.; Tatangelo, F.; Botti, G.; Foggia, M.; Izzo, F. Can Hepatocellular Carcinoma (HCC) Produce Unconventional Metastases? Four Cases of Extrahepatic HCC. *Tumori J.* **2013**, *99*, e19–e23. [[CrossRef](#)]
206. De Muzio, F.; Grassi, F.; Dell’Aversana, F.; Fusco, R.; Danti, G.; Flammia, F.; Chiti, G.; Valeri, T.; Agostini, A.; Palumbo, P.; et al. A Narrative Review on LI-RADS Algorithm in Liver Tumors: Prospects and Pitfalls. *Diagnostics* **2022**, *12*, 1655. [[CrossRef](#)] [[PubMed](#)]
207. Fusco, R.; Petrillo, M.; Granata, V.; Filice, S.; Sansone, M.; Catalano, O.; Petrillo, A. Magnetic resonance imaging evaluation in neoadjuvant therapy of locally advanced rectal cancer: A systematic review. *Radiol. Oncol.* **2017**, *51*, 252–262. [[CrossRef](#)] [[PubMed](#)]
208. Takenaga, T.; Hanaoka, S.; Nomura, Y.; Nakao, T.; Shibata, H.; Miki, S.; Yoshikawa, T.; Hayashi, N.; Abe, O. Multichannel three-dimensional fully convolutional residual network-based focal liver lesion detection and classification in Gd-EOB-DTPA-enhanced MRI. *Int. J. Comput. Assist. Radiol. Surg.* **2021**, *16*, 1527–1536. [[CrossRef](#)] [[PubMed](#)]
209. Fusco, R.; Sansone, M.; Granata, V.; Setola, S.V.; Petrillo, A.; Fusco, R.; Sansone, M.; Granata, V.; Setola, S.V.; Petrillo, A. A systematic review on multiparametric MR imaging in prostate cancer detection. *Infect. Agents Cancer* **2017**, *12*, 57. [[CrossRef](#)] [[PubMed](#)]
210. Donato, H.; França, M.; Candelária, I.; Caseiro-Alves, F. Liver MRI: From basic protocol to advanced techniques. *Eur. J. Radiol.* **2017**, *93*, 30–39. [[CrossRef](#)]
211. Culverwell, A.; Sheridan, M.; Guthrie, J.; Scarsbrook, A. Diffusion-weighted MRI of the liver—Interpretative pearls and pitfalls. *Clin. Radiol.* **2013**, *68*, 406–414. [[CrossRef](#)]
212. Budjan, J.; Schoenberg, S.O.; Attenberger, U.I. CT und MRT der Leber: Wann, was, warum? CT and MRI of the liver: When, what, why? *Der Radiol.* **2017**, *57*, 366–372. [[CrossRef](#)]
213. Miao, T.L.; Kielar, A.Z.; Hibbert, R.M.; Schieda, N. Utility of T1-weighted MRI as a predictor of liver lesion visibility on ultrasound: A clinical tool to determine feasibility of ultrasound-guided percutaneous interventions. *Eur. J. Radiol.* **2017**, *90*, 256–261. [[CrossRef](#)]
214. Tanaka, O.; Ito, H.; Yamada, K.; Kubota, T.; Kizu, O.; Kato, T.; Yamagami, T.; Nishimura, T. Higher lesion conspicuity for SENSE dynamic MRI in detecting hypervascular hepatocellular carcinoma: Analysis through the measurements of liver SNR and lesion–liver CNR comparison with conventional dynamic MRI. *Eur. Radiol.* **2005**, *15*, 2427–2434. [[CrossRef](#)]
215. Li, Z.; Mao, Y.; Huang, W.; Li, H.; Zhu, J.; Li, W.; Li, B. Texture-based classification of different single liver lesion based on SPAIR T2W MRI images. *BMC Med. Imaging* **2017**, *17*, 42. [[CrossRef](#)]
216. Hori, M.; Murakami, T.; Kim, T.; Tomoda, K.; Nakamura, H. CT Scan and MRI in the Differentiation of Liver Tumors. *Dig. Dis.* **2004**, *22*, 39–55. [[CrossRef](#)]
217. De Robertis, R.; Geraci, L.; Tomaiuolo, L.; Bortoli, L.; Beleù, A.; Malleo, G.; D’onofrio, M. Liver metastases in pancreatic ductal adenocarcinoma: A predictive model based on CT texture analysis. *Radiol. Med.* **2022**, *127*, 1079–1084. [[CrossRef](#)] [[PubMed](#)]
218. Argalia, G.; Ventura, C.; Tosi, N.; Campioni, D.; Tagliati, C.; Tufillaro, M.; Cucco, M.; Baroni, G.S.; Giovagnoni, A. Comparison of point shear wave elastography and transient elastography in the evaluation of patients with NAFLD. *Radiol. Med.* **2022**, *127*, 571–576. [[CrossRef](#)] [[PubMed](#)]
219. Zerunian, M.; Pucciarelli, F.; Caruso, D.; Polici, M.; Masci, B.; Guido, G.; De Santis, D.; Polverari, D.; Principessa, D.; Benvenga, A.; et al. Artificial intelligence based image quality enhancement in liver MRI: A quantitative and qualitative evaluation. *Radiol. Med.* **2022**, *127*, 1098–1105. [[CrossRef](#)]
220. Grassi, R.; Cappabianca, S.; Urraro, F.; Feragalli, B.; Montanelli, A.; Patelli, G.; Granata, V.; Giacobbe, G.; Russo, G.; Grillo, A.; et al. Chest CT Computerized Aided Quantification of PNEUMONIA Lesions in COVID-19 Infection: A Comparison among Three Commercial Software. *Int. J. Environ. Res. Public Health* **2020**, *17*, 6914. [[CrossRef](#)] [[PubMed](#)]
221. Inoue, Y.; Fujii, K.; Ishii, M.; Kagota, S.; Tomioka, A.; Hamamoto, H.; Osumi, W.; Tsuchimoto, Y.; Masubuchi, S.; Yamamoto, M.; et al. Volumetric and Functional Regeneration of Remnant Liver after Hepatectomy. *J. Gastrointest. Surg.* **2019**, *23*, 914–921. [[CrossRef](#)] [[PubMed](#)]
222. Zhou, Z.; Xu, M.; Lin, N.; Pan, C.; Zhou, B.; Zhong, Y.; Xu, R. Associating liver partition and portal vein ligation for staged hepatectomy versus conventional two-stage hepatectomy: A systematic review and meta-analysis. *World J. Surg. Oncol.* **2017**, *15*, 227. [[CrossRef](#)] [[PubMed](#)]

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.