

by Wanless 24 years ago, and reinforced in 1997. It states that alterations in hepatic blood flow (portal obliterative venopathy) originate a specific response, initially consisting of apoptosis secondary to acute ischemia, with ensuing parenchymal atrophy and surrounding areas of liver regeneration and chronic ischemia. The common pathologic mechanism in all the associated diseases in NRH involves liver flow abnormalities secondary to microthromboses, vascular congestion, or vasculitis. In the current case we were unable to document evidence of liver flow abnormalities. Noteworthy there are previous descriptions of the association of NRH with primary biliary cirrhosis, and this patient was AMA positive, but without bile duct damage in the biopsy. Uncommonly, the only laboratory abnormality in NRH can be cholestasis. This case is relevant because we cannot sustain Wanless' theory and because it is the first description of the association of NRH with aplastic anemia.

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A CASE OF PSEUDOLYMPHOMA OF THE LIVER

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Pseudolymphoma (reactive lymphoid hyperplasia) of the liver is an extremely rare entity, with a few cases reported so far. We encountered a 50-year-old Japanese female with pseudolymphoma of the liver. A tumor-like lesion was discovered incidentally as a hypoechoic mass with a hyperechoic rim during clinical follow-up of endometriosis. Radiological studies, such as contrast-enhanced computed tomography (CT) and angiography demonstrated a hypervascular lesion. The hepatic lesion was resected because hepatocellular carcinoma was suspected after a needle biopsy. Grossly, the lesion was well defined and measured 1.0 x 1.5 cm. Microscopically, the lesion consisted of hyperplastic lymphoid follicles with distinctive germinal centers and interfollicular areas consisting of mature lymphocytes and plasma cells. An immunohistological study revealed that the lymphoid cells of the lesion were polyclonal in immunophenotypes. These histological and immunohistochemical findings strongly suggested a pseudolymphoma of the liver. The following features have characterized the images in past cases, as well as ours: hypoechoic mass, occasionally with a rim, in ultrasonography and hypervascularity, shown by angiography and enhanced CT.

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TOO MANY COOKS SPOIL THE BROTH: THE DILEMMA OF SELECTING PATIENTS WITH HEPATOCELLULAR CARCINOMA FOR LIVER TRANSPLANTATION

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Criteria for liver transplantation in patients with hepatocellular carcinoma (HCC) differ amongst staging systems and amongst transplant centers. Originally used staging systems, e.g., TNM/UICC, are replaced by selection criteria described by Mazzaferro and the Milan criteria. The latter, however, are too tight and might breed the dilemma to falsely withhold an organ. Examining different selection criteria, it becomes obvious that a potential risk is that selected criteria may be used as one pleases in order to achieve improved results or in order to expand patient selection. This in return poses the risk of wasting an organ. Furthermore, established staging criteria (e.g., Milan criteria, Barcelona criteria) are conflicting as they use postoperative data, e.g., histological results, in order to select therapy. Thus, a comparison of results and outcome amongst transplant centers following liver transplantation and an outlook on prognosis is difficult if not impossible. The aim of this study was to analyze currently used

selection criteria for liver transplantation and to determine their reliability related to patient selection, therapy selection, and prognosis. We have reviewed the medical literature since 1954 to identify criteria published for the staging of HCC. To evaluate and compare the reliability of these criteria we focused on two questions: (1) Can the criteria be used in the decision making process for liver transplantation before and for treatment, and (2) How accurately can these criteria predict prognosis? As a tool we used the certainty factor (C factor) defining the level of diagnostic judgment and reliability: C1 clinical, C2 radiological, C3 biopsy, C4 resection, C5 autopsy. As an additional criterion liver function parameters were selected. Twenty-one staging systems were used for this comparative analysis. 1) Five staging systems can be used for therapy selection (C1-C3). 2) Three systems provided prognosis assessment only (C4-C5). 3) Thirteen staging systems allowed to both assist in decision making for therapy based on clinical criteria as well as the assessment of a prognosis based on pathological criteria (C1 -C5). 4) Only five staging systems assessed tumors factors as well as liver function (C1-C5, LF). The ideal staging system should 1) facilitate the selection of transplant candidates based on tumor factors and clinical parameters and 2) predict long term prognosis as indicated by pathological tumor extent. It would be desirable to use a uniform staging system as suggested by the AHPBA consensus statement of 2003.

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RADIO-FREQUENCY ABLATION IN THE PORCINE MODEL: COMPARISON OF MULTIPLE COOL TIP PROBES AND A SWITCHING CONTROLLER WITH A STANDARD THREE-PROBE CLUSTER

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Evaluation of the Switching Controller with multiple, combined cool tip probes for an output-based radio frequency device. Radio-frequency (RF) ablation was performed in three randomly selected segments of the liver in 12 pigs. Half of the ablations were performed with a Pringle maneuver and half without. Ablations were performed with three 3.0 cm active tip, cooled RF probes spaced 2.0 cm apart and a 200 watt RF generator. Ablations using the standard cluster of probes were performed for 12 minutes in the non-Pringle subgroup and 6 minutes in the Pringle subgroup. Ablations using the Switching Controller with multiple, combined cool tip probes were performed for 16 minutes in the non-Pringle subgroup and 8 minutes in the Pringle subgroup. The Switching Controller delivered current that alternated among the probes, based on impedance (to 30 Ohms above baseline) and time (30 seconds maximum). The ablation dimensions, volume, temperature, current delivery parameters, and postablation histology were evaluated. A total of 34 successful ablations were performed. The minimum ablation diameter (D_{min}) in the standard cluster group was 40.3 ± 4.3 mm (42.5 ± 4.1 mm for the Pringle group and 38.1 ± 3.6 mm for the non-Pringle group). The maximum ablation surface area (SA_{max}) in this group was 16.0 ± 3.3 cm² (17.6 ± 2.2 sqcm for the Pringle group and 14.2 ± 3.5 cm² for the non-Pringle group). The ablation volume in the cluster group was 36.9 ± 9.5 ml (40.1 ± 8.1 ml for the Pringle group and 33.7 ± 10.4 ml for the non-Pringle group). In the Switching Controller Multiprobe group, the ablation D_{min} , was 51.4 ± 7.4 mm (54.5 ± 8.5 mm for the Pringle group and 48.2 ± 4.8 mm for the non-Pringle group). The ablation SA_{max} in this group was 22.4 ± 4.7 cm² (23.9 ± 4.9 cm² for the Pringle group and 20.8 ± 4.1 cm² for the non-Pringle group). The ablation volume in the multiprobe group was 66.1 ± 17.9 ml (68 ± 16.8 ml for the Pringle group and 64.3 ± 19.6 ml for the non-Pringle group). Technology to increase the size of ablated areas and shorten the procedural time continues to evolve. The use of the