

## HISTOPATHOLOGIC SPECTRUM OF “NORMAL” LIVER IN LIVING DONOR CANDIDATES

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Evaluation of potential liver donors is a multistep process which also includes evaluation of liver histology when indicated. We aimed to document the range of histology in this special population whose serological and biochemical tests are within the reference range. The study period was between 1999 and 2003 during which all liver donors underwent liver biopsy in our institution and 102 liver biopsies from 43 men and 59 women with an average age of 37 years (range, 19-75) were included in the study.

**Results:** Average aggregate length of biopsy was 23,68 mm. The mean number of complete portal tract profiles and terminal hepatic venules were 30,33 and 10,59, respectively. The mean number of portal tracts without a bile duct, hepatic artery and portal vein and the ranges were, 6,22%, 4,93%, 6,82%, respectively.

Fifty-nine (58%) out of 102 biopsies showed histological abnormalities including one or more of these findings; macrovesicular steatosis (MaS) (43%), microvesicular steatosis (MiS) (12%), epitheloid granulomas (5%), lipogranulomas (2%), portal inflammation (22%), Kupffer cell aggregates (16%), ceroid laden macrophages in portal tracts (15%) and in parenchyma (%6). MaS ranged between 1% and 80% whereas, MiS ranged between 1% and 10%. In 75% of cases with MaS, steatosis was  $\leq$  5%. There were also some common findings seen in biopsies with or without histological abnormalities; increased number of glycogenated nuclei (33%), striking nuclear polymorphism (%63), binuclear hepatocytes (61%). The number of binuclear hepatocytes per high power field ranged between 2-24 (mean: 9,83).

**Conclusion:** More than half of the donor biopsies show histological abnormalities. Given the fact that this result comes from a population with normal serological and biochemical tests, the necessity of liver biopsy in the evaluation of living donors should be underlined.