

# Behaviour of nucleolar organizer regions in the different Wistar rat liver lobes

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Laboratory Animals (1994) 28, 50-54

To avoid making more Type I errors than those usually expected, the level of significance, alpha, was corrected by the number of verifications [Miller 1966]. Also, the Roy-Bose test was used to simultaneously compare the dependent variables considered. Furthermore, in regards to the statistical analysis, prior to each test, the hypothesis as to the normality of the scores and the homogeneity of the variance was checked. The null hypothesis was rejected when its probability was less than 0.05.

## Results

The area of the nuclei is similar in both the middle and right lateral lobes, which in turn, is smaller than that of the left lateral and caudate lobes (Fig. 3). The Ag-NOR area is less in the LLL and ML in relation to the RLL and CL, this decrease being statistically significant (SS) in the ML in relation to the CL (Fig. 4).

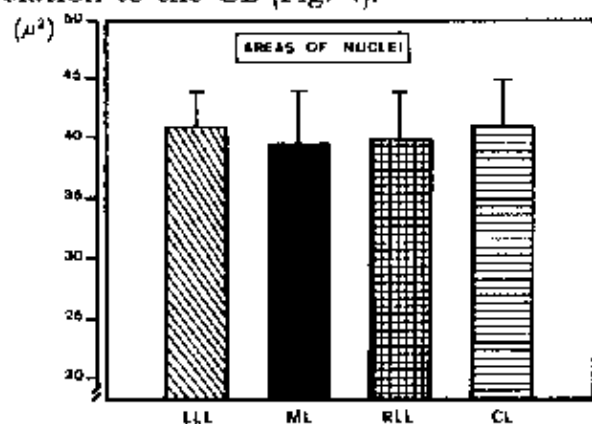


Fig 3 Areas of nuclei (µm<sup>2</sup>) in the left lateral lobe (LLL), middle lobe (ML), right lateral lobe (RLL) and caudate lobe (CL)

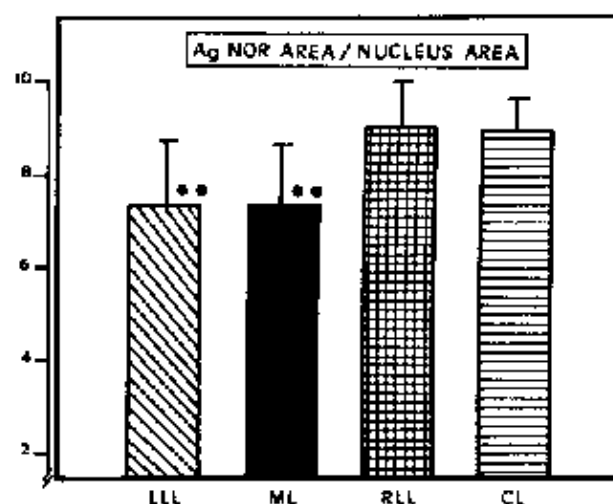
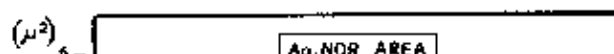


Fig 5 The percentage of Ag-NORs in the nuclear area in the left lateral lobe (LLL), middle lobe (ML), right lateral lobe (RLL) and caudate lobe (CL). \*P<0.05: SS value in relation to CL. ●P<0.05: SS value in relation to RLL

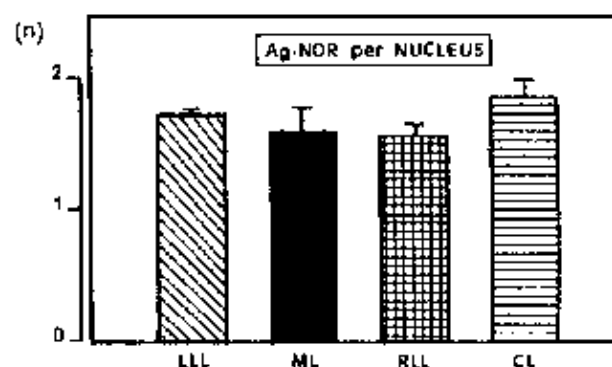
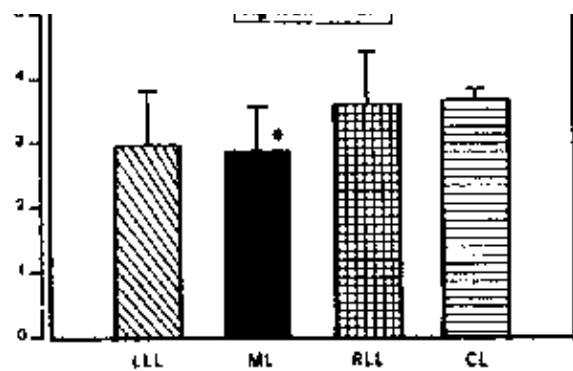


Fig 6 Number of Ag-NOR per nucleus in the left lateral lobe (LLL), middle lobe (ML), right lateral lobe (RLL) and caudate lobe (CL)

The percentage of Ag-NOR of the nuclear area presents an increase in the RLL and CL which is SS in relation to the LLL and ML (Fig. 5). The direct relationship between the Ag-NOR and the nuclear areas can be



**Fig 4** Ag-NOR area ( $\mu\text{m}^2$ ) in the left lateral lobe (LLL), middle lobe (ML), right lateral lobe (RLL) and caudate lobe (CL). \* $P < 0.05$ : SS value of ML in relation to CL

used as an effective parameter of the real behaviour of the nucleolar activity of the hepatocyte.

The number of Ag-NORs per nucleus is greater in the CL and LLL than in the ML and RLL (Fig. 6).

### Discussion

The SS increase of the Ag-NOR percentage in the CL in relation to the ML as well as the SS increase of the Ag-NOR/nucleus ratio in the CL and LLL in relation to the