Chromatin structure in situ: the contribution of DNA ultrastructural cytochemistry

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Supplementary Figures

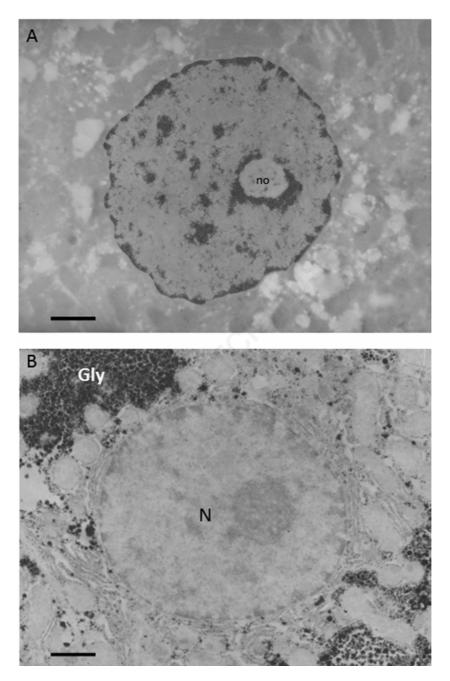


Figure 1. Thin sections from rat liver sample fixed in 4% paraformaldehyde and resin embedded. A) Section was pre-treated with HCl and then stained with the osmium-ammine/SO₂ complex; only the DNA-containing structures are rendered electron-opaque. no: unstained nucleolar body. B) After periodic acid pre-treatment the osmium-ammine/SO₂ complex allows to selectively visualize glycogen (Gly), whereas the other nuclear (N) and cytoplasmic structures are not rendered electronopaque. Scale bar: 1 μm.

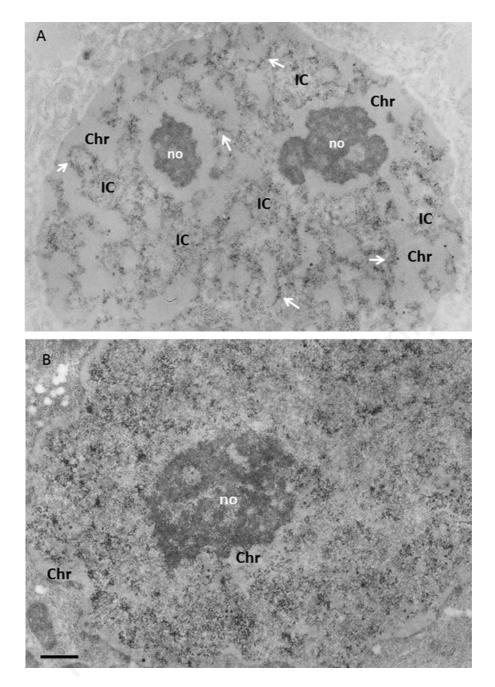


Figure 2. Thin sections from rat liver samples, stained with the uranyl-EDTA-lead procedure for the preferential visualization of the ribonucleoprotein containing structures. A) Resting hepatocyte; chromatin (Chr) is bleached; At the border of the bleached chromatin a rim of stained structures is visible, the so-called perichromatin fibrils (*arrows*) which appear to be well separated from the interchromatin space (IC); no, nucleolus. B) Regenerating hepatocyte; the amount of bleached compacted chromatin masses is significantly reduced (Chr); the ribonucleoprotein containing structures, mainly composed of perichromatin fibrils, are uniformly distributed throughout the nucleoplasm, thus rendering the interchromatin space no longer detectable; no, nucleolus. Scale bar: $0.4 \,\mu\text{m}$.

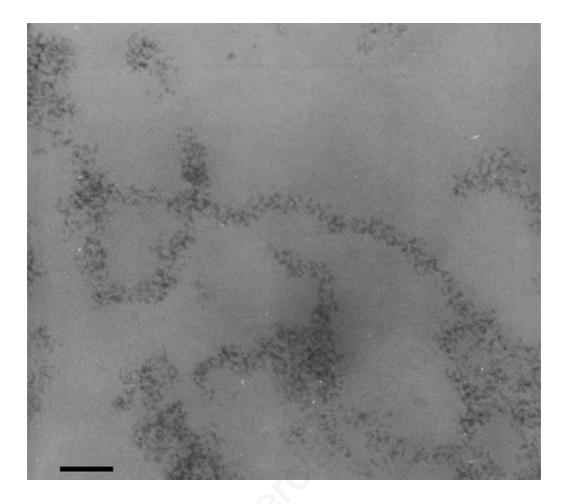


Figure 3. Detail of Figure 5 (text) showing a solitary, long fiber within the nucleolar body, with a thickness of 20-25 nm. Scale bar: 50 nm.