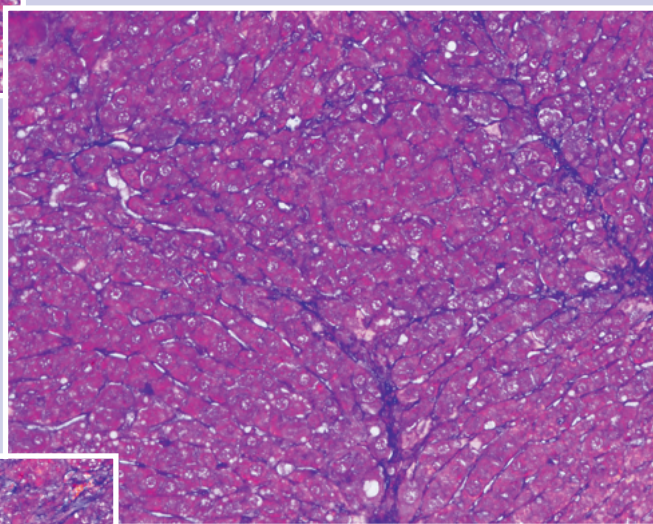
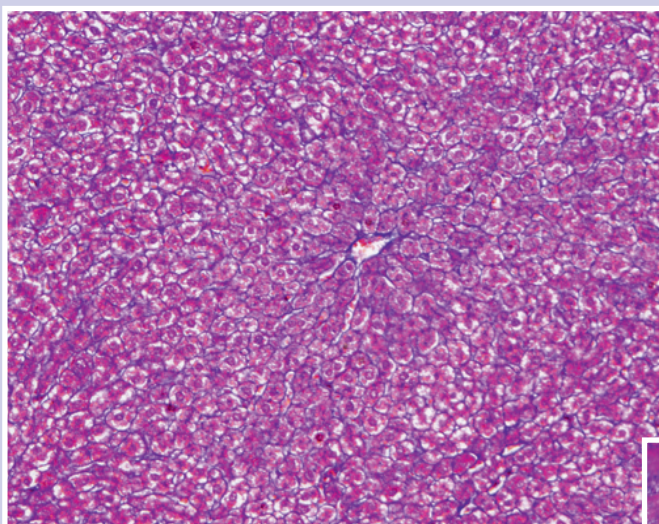
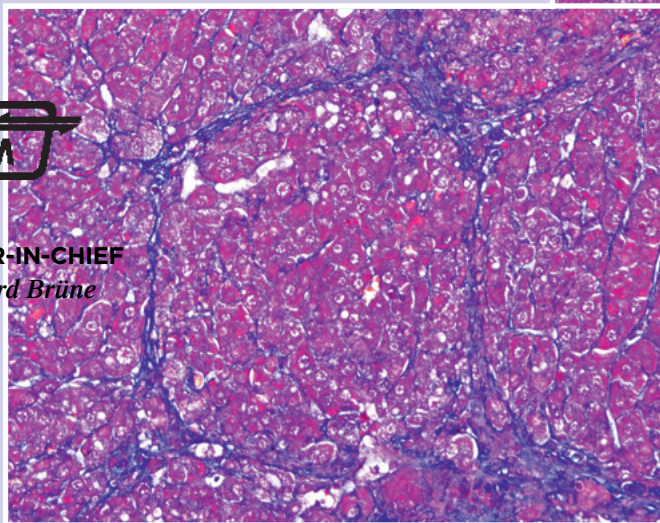



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COVER ILLUSTRATION

On the front cover, Masson's trichrome staining for collagen in paraffin sections of rat liver demonstrating pathogenesis of hepatic fibrosis is depicted. Liver injury was induced by serial intraperitoneal administrations of *N*-nitrosodimethylamine (NDMA) in doses of 1 mg/100 g body weight on three consecutive days of every week over a period of three weeks. A rapid increase in collagen content was noticed with constant raise occurring from day 7 to 21 (upper image: before NDMA treatment). On day 14, initiation of fibrosis and deposition of collagen fibers could be observed (exemplified by the middle image). By day 21, deposition of thick collagen fibers with marked hepatic fibrosis and early cirrhosis was present (lower image). **Joseph George used this rat model of liver injury** to examine various biochemical parameters during the development of liver fibrosis and cirrhosis, e.g. serum and liver selenium levels, total glutathione content and glutathione peroxidase activity, as well as serum interleukin-6 and transforming growth factor- β 1 levels, to evaluate oxidative stress (see the article on pp. 499–509 in this issue). The results suggest that decreased selenium and glutathione peroxidase contribute to the impairment of cellular antioxidant defense, which in turn results in oxidative stress and trigger pathogenesis of hepatic fibrosis. The study further demonstrates that Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) with selenium hydride generation is a reliable and sensitive method for determination of selenium in biological samples.

