



NTP Nonneoplastic Lesion Atlas

Liver, Oval cell – Hyperplasia

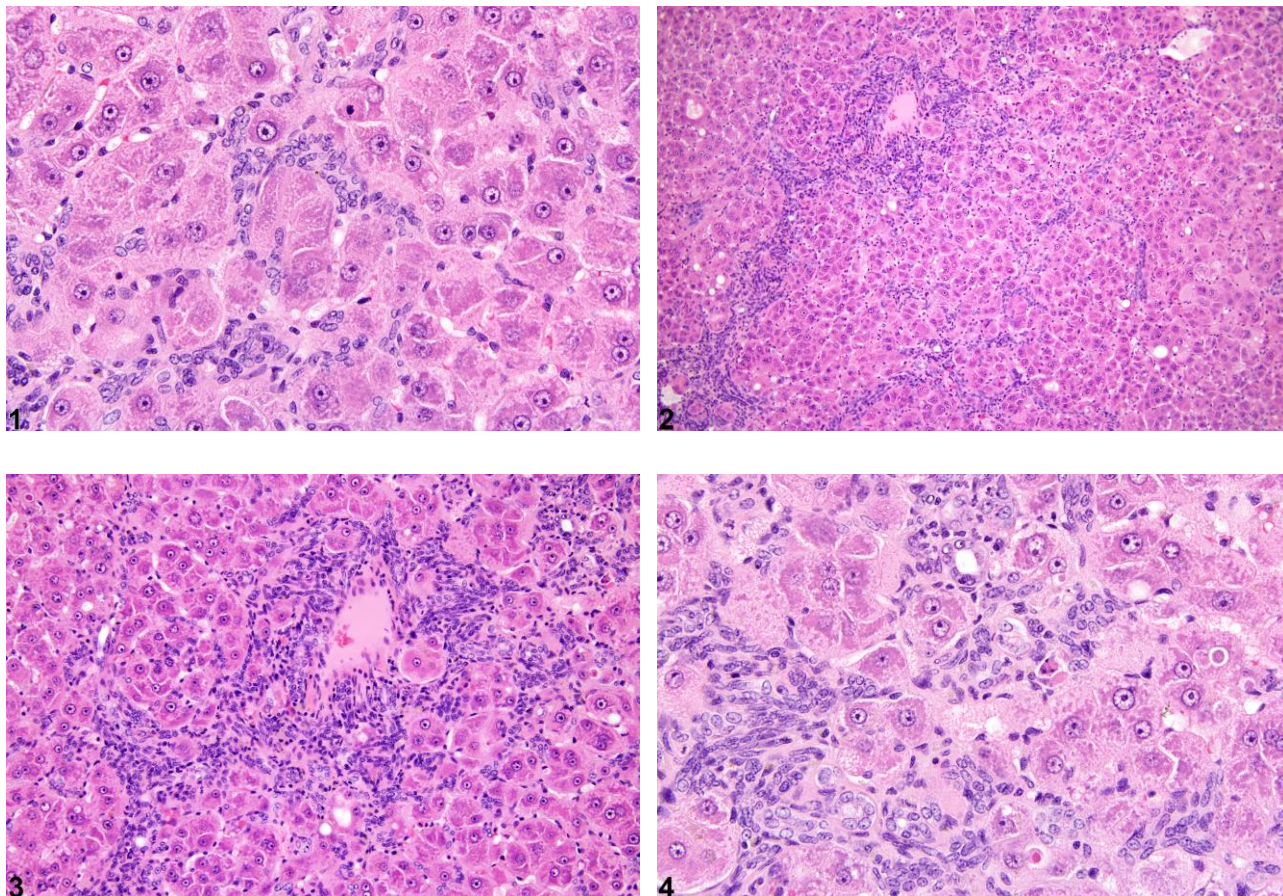
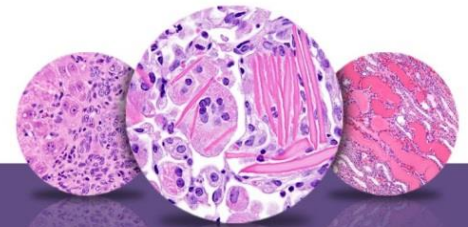


Figure Legend: **Figure 1** Oval cell hyperplasia in a female Harlan Sprague-Dawley rat from a chronic study. **Figure 2** Oval cell hyperplasia in a female Harlan Sprague-Dawley rat from a chronic study. **Figure 3** Oval cell hyperplasia in a female Harlan Sprague-Dawley rat from a chronic study. **Figure 4** Oval cell hyperplasia in a female Harlan Sprague-Dawley rat from a chronic study.

Comment: Oval cell hyperplasia (Figure 1) is rarely seen in control animals. It typically begins either in periportal areas or in subcapsular regions of the liver. The proliferating oval cells are spindleoid and initially extend out from portal areas in a linear array; they may encircle hepatic lobules, and in severe cases they may form irregular solid nests of proliferating cells. Since oval cell hyperplasia occurs primarily in animals treated with hepatotoxic xenobiotics or in cases of infection, it is usually associated with varying degrees of hepatocyte degeneration and necrosis



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and bile duct hyperplasia. Figure 1 was graded as 2+ (mild), and Figure 2, Figure 3, and Figure 4 as 4+ (marked).

Recommendation: Oval cell hyperplasia should be diagnosed and given a severity grade whenever present, even when part of a complex set of hepatic changes. The pattern and extent of oval cell hyperplasia should be described in the pathology narrative along with accompanying hepatic changes.

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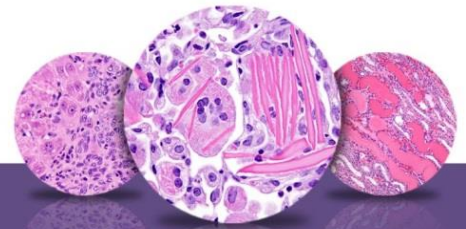
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