

Histopatological evaluation extracts of *agrimoniae herba* and *cichorii herba* in experimental induced hepatotoxicity.

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Background. *Agrimonia eupatoria* L. (Rosaceae) and *Cichorium intybus* L. (Asteraceae) are medicinal plants with a long tradition of use for a variety of therapeutic purposes: anti-inflammatory, astringent, antioxidant, being rich in phenolic compounds (flavonoids, phenolic acids and tannins). There is limited data available on their hepatoprotective effects, particularly in relation to extracts obtained from their aerial parts.

Material and methods. The plant products derived from the two species were collected throughout the flowering period and dried extracts of the aerial parts were obtained with 60% (w/w) ethanol. Toxic hepatitis was induced an *in vivo* model with CCl₄ (0,4 g/100 g) in rats and the protective effects of the two extracts, in doses of 100, 200, 400 mg of (*Agrimonia herba* and *Cichorii herba*) were evaluated by biochemical and histological investigations. For histological analysis of the samples, hematoxylin-euzine staining was performed and the samples were visualized by light microscopy (type Olympus).

Results. The histological analysis (H-Ex90) of the samples determined that in the liver we have swelling of the hepatocyte cytoplasm with granular inclusions, dilated centrilobular vein, dilated dysse spaces and interstitial oedema in all groups treated with CCl₄; for the maximum dose of *Agrimonia herba* extracts (400 mg)- cytoplasmic swelling of hepatocytes with granular inclusions, dilated centrilobular vein, dilated dysse spaces, interstitial oedema and perilobular vesicular and hydropic dystrophy were observed, indicating an aggressive process on the liver parenchyma.

Conclusions. The *Cichorii herba extract* in doses: 100, 200, 400 mg and *Agrimoniae herba extract* (100, 200 mg) can be used in further studies for the development of new pharmaceutical forms.

Keywords: *Agrimonia eupatoria*, *Cichorium intybus* extracts, histopatology.