

Article

# The Influence of Ultra-Low Tidal Volume Ventilation During Cardiopulmonary Resuscitation on Renal and Hepatic End-Organ Damage in a Porcine Model

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**Table S1.** Grading of histopathological liver damage. The assessment criteria are shown, which were used to classify the six-level damage severity of the 5 items. The term "zone" refers to the metabolic zones of the liver acini [15].

Subitem	Grading of Severity					
	0	1	2	3	4	5
<b>Centrilobular Necrosis</b>	No pathological changes	Incipient necrotic changes in individual hepatocytes	Isolated necrosis in the area of the central veins	Centrilobular necrosis limited to zone 3 in some liver lobules	Centrilobular necrosis up to zone 2 in many liver lobules	Extensive centrilobular necrosis over all zones in most lobules of the liver
<b>Hydropic Cell Swelling</b>	No pathological changes	Isolated incipient cell swelling	Cell swelling of several individual hepatocytes	Cell swelling of neighboring hepatocytes with rarefaction of the cell plasma	Pronounced hydropic cell swelling in several areas of the liver lobules	Pronounced hydropic cell swelling over extensive areas of the liver lobules with marked decrease in stainability
<b>Inflammation</b>	Scattered immune cells in the blood vessels	Increased immune cells in the blood vessels with transfer into the tissue, activated local Kupffer cells	Increased occurrence of immune cells in the area of the central veins	Increased occurrence of immune cells up to zone 3	Increased occurrence of immune cells up to zone 2	Generalized inflammation of the liver lobules

<b>Venous Congestion</b>	No signs of venous congestion	Isolated dilated central veins without compression of the adjacent tissue	Multiple dilated central veins without compression of adjacent tissue	Hyperemic with a plurality of dilated central veins	Hyperemic with multiple dilated central veins and compression of adjacent tissue	Pronounced hyperemic with dilatation of almost all central veins
<b>Sinusoidal Congestion</b>	No evidence of sinusoidal congestion	Scattered dilatation of sinusoids adjacent to central veins	Scattered enlargement of sinusoids over zone 3	Increased enlargement of sinusoids over zone 2	Pronounced enlargement of sinusoids with hepatocytes drifting apart and accumulation of erythrocytes in zone 1	Pronounced enlargement of sinusoids with hepatocytes drifting apart and congestion of erythrocytes in all zones

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