Hypoxic hepatitis: clinical and hemodynamic study in 142 consecutive cases.

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Abstract
The centrilobular liver cell necrosis observed in hypoxic hepatitis is generally attributed to failure of hepatic blood perfusion. Accordingly, this injury of the liver is commonly recognized under the terms "shock liver" or "ischemic hepatitis." During a 10-year period, 142 episodes of hypoxic hepatitis were consecutively identified in the intensive care unit of a general hospital, and the clinical, biological, and hemodynamic parameters were prospectively collected on individual files. We conducted the current study to assess retrospectively the role of the hemodynamic mechanisms of tissue hypoxia: ischemia, passive venous congestion, and hypoxemia. Among the 142 episodes of hypoxic hepatitis, 138 were separated in 4 main groups based on clinical features: decompensated congestive heart failure (80 cases), acute cardiac failure (20 cases), exacerbated chronic respiratory failure (19 cases), and toxic/septic shock (19 cases). An elementary hemodynamic evaluation, including blood pressure, central venous pressure, and arterial blood gas analysis, was carried out in every episode and a more complete hemodynamic assessment through pulmonary artery catheterization was performed in 61 episodes. The hemodynamic mechanisms responsible for hypoxic hepatitis were different in the 4 groups. In congestive heart failure and acute heart failure, the hypoxia of the liver resulted from decreased hepatic blood flow (ischemia) due to left-sided heart failure and from venous congestion secondary to right-sided heart failure. In chronic respiratory failure, liver hypoxia was mainly due to profound hypoxemia. In toxic/septic shock, oxygen delivery to the liver was not decreased but oxygen needs were increased, while the liver was unable to use oxygen properly. In all conditions underlying hypoxic hepatitis, except toxic/septic shock, a shock state was observed in only about 50% of the cases. Therefore, the expressions "shock liver" or "ischemic hepatitis" are misleading and should be replaced by the more general term "hypoxic hepatitis."

PMID: 14663289 [PubMed - indexed for MEDLINE]

MeSH Terms, Substances

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