

**KORELASI DERAJAT KEPARAHAN CEDERA HEPAR
BERDASARKAN KLASIFIKASI AMERICAN ASSOCIATION FOR THE
SURGERY OF TRAUMA (AAST) DENGAN VOLUME
HEMOPERITONEUM PADA PEMERIKSAAN CT SCAN ABDOMEN**

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INTISARI

Latar Belakang: Hepar merupakan organ kedua tersering mengalami cedera padatrauma tumpul abdomen dan menjadi penyebab kematian utama. Kerusakan struktur organ setelah trauma abdomen dapat menyebabkan hemoperitoneum yang sulit didiagnosis secara klinis. Diagnosis cedera hepar dan volume hemoperitoneum yang akurat menjadi kunci dalam manajemen pasien dengan trauma abdominal.

Tujuan: Penelitian ini bertujuan untuk mengetahui korelasi antara derajat keparahan cedera hepar berdasarkan klasifikasi *American Association for the Surgery of Trauma* (AAST) dengan volume hemoperitoneum pada pemeriksaan CT scan abdomen.

Metode: Penelitian *cross sectional* ini dilakukan di RSUP Dr. Sardjito pada Oktober- November 2023 dengan mengambil data sekunder pasien cedera hepar periode Juni 2017-Juni 2023. Seluruh subjek pada periode tersebut diambil. Derajat keparahan cedera hepar dari pemeriksaan *CT scan* abdomen dan volume hemoperitoneum sejumlah 32 subjek yang memenuhi kriteria inklusi dan eksklusi, selanjutnya dianalisis menggunakan uji *Spearman*. Data diambil dari PACS dan instalasi rekam medis RS.

Hasil: Analisis bivariat dengan uji *Spearman* menunjukkan korelasi yang signifikan antara derajat keparahan cedera hepar dengan volume hemoperitoneum ($p = 0.005$, $r = 0.487$).

Kesimpulan: Terdapat korelasi positif antara derajat keparahan cedera hepar berdasarkan klasifikasi *American Association for the Surgery of Trauma* (AAST) pada pemeriksaan *CT scan* abdomen dengan volume hemoperitoneum, yaitu semakin tinggi derajat cedera hepar, maka semakin tinggi volume hemoperitoneum.

Kata Kunci: cedera hepar, hemoperitoneum, CT, AAST.

**CORRELATION OF SEVERITY OF LIVER INJURY BASED ON
AMERICAN ASSOCIATION FOR THE SURGERY OF TRAUMA (AAST)
CLASSIFICATION WITH VOLUME OF HEMOPERITONEUM ON
ABDOMINAL CT SCAN EXAMINATION**

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ABSTRACT

Background: The liver is the second most commonly injured organ in blunt abdominal trauma and is the leading cause of death. Damage to organ structures after abdominal trauma can lead to hemoperitoneum which is difficult to diagnose clinically. Accurate diagnosis of hepatic injury and hemoperitoneum volume is key in the management of patients with abdominal trauma.

Objective: This study aims to determine the correlation between the severity of liver injury based on the American Association for the Surgery of Trauma (AAST) classification and the volume of hemoperitoneum on abdominal CT scan.

Methods: This cross sectional study was conducted at Dr. Sardjito General Hospital in October-November 2023 by taking secondary data of liver injury patients from June 2017-June 2023. All subjects in that period were taken. The severity of liver injury from abdominal CT scan examination and hemoperitoneum volume of 32 subjects who met the inclusion and exclusion criteria, then analyzed using the Spearman test. Data were retrieved from PACS and the medical record installation of the hospital.

Results: Bivariate analysis with the Spearman test showed a significant correlation between the severity of liver injury and hemoperitoneum volume ($p=0.005$, $r=0.487$).

Conclusion: There is a positive correlation between the severity of liver injury based on the American Association for the Surgery of Trauma (AAST) classification on abdominal CT scan and hemoperitoneum volume, the higher the degree of liver injury, the higher the hemoperitoneum volume.

Keywords: liver injury, hemoperitoneum, CT, AAST.