

INTISARI

Telah dilakukan penelitian tentang kombinasi sari wortel (*Daucus carota*, Linn) dan tomat (*Lycopersicon lycopersicum*, L) sebagai hepatoprotektor mencit terinduksi parasetamol. Tujuan penelitian: membuktikan pemberian kombinasi wortel dan tomat sebagai hepatoprotektor mencit terinduksi parasetamol, menentukan kombinasi paling baik sebagai hepatoprotektor, dan mengkaji gambaran histopatologinya.

Jenis penelitian eksperimental rancangan acak lengkap pola searah. Empat puluh ekor mencit jantan galur Swiss, umur 2-3 bulan, bobot 20-30 gram dibagi 8 kelompok, tiap kelompok berjumlah 5 ekor mencit. Kelompok I, kontrol positif diberi parasetamol dosis hepatotoksik 250 mg/kg BB secara peroral. Kelompok II, kontrol negatif diberi CMC 1% dengan dosis 330 mg/kg BB. Kelompok III, diberi kombinasi tertinggi 1:4 sari wortel dan tomat sekali sehari selama 8 hari. Kelompok IV-VIII berturut-turut diberi sari wortel dan tomat kombinasi 1:1/4, 1:1/2, 1:1, 1:2, dan 1:4 sekali sehari selama 8 hari dan pada ke-9 diberi parasetamol. Setelah 24 jam, hewan uji diambil darahnya dari vena orbitalis mata kemudian dikorbankan dan diambil hatinya untuk pembuatan preparat histopatologi.

Data dikumpulkan dari pemeriksaan GPT-serum dan skoring gambaran histopatologi hati kemudian dianalisis statistik. Hasil analisis menunjukkan kombinasi sari wortel dan tomat perbandingan 1:1/4, 1:1/2, 1:1, 1:2, dan 1:4 menghasilkan penurunan kerusakan secara berurutan: 80,75%; 72,33%; 92,66%; 86,36%; dan 89,63%, terlihat sediaan yang berefek hepatoprotektif paling baik adalah kombinasi 1:1. Pengamatan histopatologi lima kelompok perlakuan menghasilkan angka proteksi secara berurutan 44%, 40%, 64%, 52%, dan 56%.

Kata kunci: wortel, tomat, hepatoprotektor, kombinasi sari

ABSTRACT

An experimental study on carrot's (*Daucus carota*, Linn) and tomato's (*Lycopersicon lycopersicum*, L) essence combination had been conducted on male mice to investigate the hepatoprotective activity of carrot's and tomato's essence combination againsts acetaminophen induced hepatotoxicity. Beside that, the aim is obtain the best combination as the hepatoprotector and inspect the histopatology.

An oneway completely random experimental design was done in forty Swiss male mice, 2-3 months years old with 20-30 grams body weight. There are 8 groups, each groups contain 5 mice. Positive control (first group) was given 250 mg/kg BB hepatotoxic dosage of acetaminophen by per oral. Second group as negative control was given CMC 1%. Third group was given the highest combination carrot's and tomato's essence 1:4, everyday once a day along 8 days. Fourth to eighth groups were ingested combination 1:¹/₄, 1:¹/₂, 1:1, 1:2, and 1:4 along 8 days with parasetamol at the ninth day. After 24 hours, the blood from eyes sinus orbitalis was sampled and mice were sacrificed, to take the liver so that can be made to histopathology object.

Data were collected from serum GPT and skoring result of histopatology preparation, then analyzed by statistic. The result marked that administration of carrot's and tomato's essence combination 1:¹/₄, 1:¹/₂, 1:1, 1:2, and 1:4 were able to decrease the hepatic destruction in precentage: 80,75%; 72,33%; 92,66%; 86,36%; and 89,63%, the best combination that has hepatoprotective effect is 1:1. From five groups histopatological inspection, the protection value reach in precentage 44%, 40%, 64%, 52%, and 56%.

Keywords: carrot, tomato, hepatoprotector, essence combination