

ABSTRAK

Hiperurisemia merupakan kondisi meningkatnya kadar asam urat serum yang sering ditemukan pada populasi umum. *Gout* muncul ketika kristal urat memicu proses inflamasi berulang yang mengarah pada peradangan kronis. Salah satu penanda inflamasi yang dapat diukur adalah high sensitivity *C-Reactive Protein* atau hsCRP. Peradangan sistemik yang berlangsung lama memiliki potensi terhadap perubahan struktural pembuluh darah. Ketebalan tunika intima-media pada arteri karotis atau *Carotid Intima-Media Thickness* (CIMT) digunakan sebagai indikator awal dari proses aterosklerosis. Tujuan penelitian ini untuk mengetahui hubungan kadar hsCRP terhadap ketebalan tunika intima-media arteri karotis pada pasien *gout*. Penelitian ini menggunakan desain observasional analitik dengan pendekatan retrospektif. Subjek penelitian merupakan pasien *gout* yang menjalani rawat jalan di RSUP Dr. Kariadi Semarang selama bulan Maret sampai Mei tahun 2025. Pemilihan sampel dilakukan secara consecutive sampling. Data yang dikumpulkan meliputi hasil pemeriksaan kadar hsCRP dan hasil USG Doppler karotis. Rata-rata kadar hsCRP pasien *gout* sebesar 0.57 mg/L dengan nilai tertinggi sebesar 3.00 mg/L. Rata-rata ketebalan CIMT arteri karotis kanan sebesar 0.6 mm dan kiri sebesar 0.61 mm. Hasil analisis tidak menunjukkan hubungan yang bermakna antara kadar hsCRP dan ketebalan tunika intima-media arteri karotis. Penelitian ini menyarankan analisis lanjutan terhadap pengaruh kategori kadar hsCRP tinggi dan normal serta pengaruh faktor lain seperti konsumsi obat dan kebiasaan merokok untuk mengurangi potensi bias hasil.

Kata Kunci: Arteri karotis, *Gout*, hsCRP, Inflamasi, Ketebalan tunika intima-media

ABSTRACT

Hyperuricemia is a condition characterized by elevated serum Uric Acid levels that is commonly found in the general population. Gout occurs when urate crystals trigger recurrent inflammatory processes that lead to chronic inflammation. One measurable marker of inflammation is high sensitivity C-Reactive Protein or hsCRP. Prolonged systemic inflammation has the potential to cause structural changes in blood vessels. The thickness of the intima-media layer in the carotid artery, known as Carotid Intima-Media Thickness (CIMT), is used as an early indicator of the atherosclerosis process. This study aimed to determine the relationship between hsCRP levels and carotid artery intima-media thickness in patients with gout. The study used an observational analytic design with a retrospective approach. The research subjects were gout patients undergoing outpatient treatment at Dr. Kariadi General Hospital in Semarang from March to May 2025. Sampling was conducted using consecutive sampling methods. Collected data included hsCRP blood test results and carotid Doppler ultrasound findings. The average hsCRP level in gout patients was 0.57 mg/L, with the highest value recorded at 3.00 mg/L. The average CIMT in the right carotid artery was 0.6 mm and 0.61 mm in the left carotid artery. The analysis results showed no significant relationship between hsCRP levels and Carotid Intima-Media Thickness. The study recommends further analysis by categorizing hsCRP levels into high and normal groups and examining the influence of factors such as medication use and smoking history to reduce potential bias in the findings.

Keywords: Carotid artery, Gout, hsCRP, Inflammation, Intima-media thickness