

## ABSTRAK

Gagal ginjal kronik adalah suatu kondisi ginjal mengalami kerusakan progresif secara struktural dan fungsional yang terjadi lebih dari 3 bulan. Kerusakan ginjal ditandai dengan adanya penurunan laju filtrasi glomerulus. Laju filtrasi glomerulus menunjukkan banyaknya nefron yang berfungsi pada ginjal. Salah satu fungsi ginjal yang terganggu adalah sekresi hormon eritropoietin yang merupakan hormon yang berfungsi dalam pembentukan eritrosit. Kerusakan fungsi ginjal menyebabkan penurunan hormon eritropoietin sehingga menyebabkan gangguan pembentukan eritrosit dan terjadi kelainan morfologi eritrosit. Tujuan dari penelitian ini untuk menganalisis hubungan laju filtrasi glomerulus dengan kelainan morfologi eritrosit pada pasien gagal ginjal kronik. Jenis penelitian adalah observasional analitik dengan pendekatan *cross sectional*. Penelitian dilakukan di Rumah Sakit Umum Haji Surabaya pada bulan Mei-Juni 2022. Jumlah sampel penelitian sebanyak 30 orang yang diambil melalui teknik *purposive sampling*. Hasil penelitian didapatkan penurunan laju filtrasi glomerulus dengan nilai rata-rata 4,9433 mL/menit, nilai terendah 2,3 mL/menit, dan nilai tertinggi 11,7 mL/menit, serta ditemukan kelainan morfologi eritrosit berdasarkan ukuran sebanyak 33% dan kelainan berdasarkan warna sebanyak 30%. Kesimpulan dari hasil penelitian menunjukkan bahwa terdapat hubungan yang signifikan antara laju filtrasi glomerulus dengan kelainan morfologi eritrosit pada pasien gagal ginjal kronik, semakin kecil nilai laju filtrasi glomerulus maka ditemukan kelainan morfologi eritrosit semakin tinggi.

**Kata kunci :** Gagal Ginjal Kronik, Laju Filtrasi Glomerulus, Kelainan Morfologi Eritrosit

## ABSTRACT

Chronic kidney disease is a condition where the kidneys experience structural and functional progressive damage that lasts more than 3 months. Kidney damage is characterized by a decrease in the glomerular filtration rate. The glomerular filtration rate indicates the number of functioning nephrons in the kidney. One of the impaired kidney functions is the secretion of the hormone erythropoietin, which is a hormone that functions in the formation of erythrocytes. Damage to kidney function causes a decrease in the hormone erythropoietin, causing disruption of erythrocyte formation and abnormal erythrocyte morphology. The purpose of this study was to analyze the correlation between glomerular filtration rate and abnormal erythrocyte morphology in patients of chronic kidney disease. This type of research is analytic observational with a cross sectional approach. The study was conducted at Surabaya Haji General Hospital in May-June 2022. The number of samples was 30 people who were taken through purposive sampling technique. The results showed a decrease in the glomerular filtration rate with an average value of 4.9433 mL/minute, the lowest value 2.3 mL/minute, and the highest value 11.7 mL/minute, and found erythrocyte morphological abnormalities based on size as much as 33% and abnormalities 30% based on color. The conclusion of the research shows that there is a significant correlation between the glomerular filtration rate and abnormal erythrocyte morphology in patients of chronic kidney disease.

**Keywords** : Chronic Kidney Disease, Glomerular Filtration Rate, Abnormal Erythrocyte Morphology