Pengaruh Rejimen RCHOP pada Aktivitas dan Sistem Koagulasi Pasien Limfoma Non Hodgkin = Effects of R-CHOP Regimens on the Activity and Coagulation System of non-Hodgkin's lymphoma patients

Maya Hestiningtyas Arini Djohansjah, author

Abstrak

Latar Belakang : Kemoterapi sitostatika dilaporkan meningkatkan aktivitas koagulasi (D-dimer meningkat) dan mengubah hypercoagulable state menjadi hiperkoagulasi. Hypercoagulable state adalah suatu kondisi yang berpotensi untuk terjadinya trombosis (misal pada pasien kanker) yang ditandai dengan perubahan aktivitas koagulasi pra trombin (peningkatan fragmen protrombin 1-2 atau kompleks TAT) dengan D-dimer yang normal. Hiperkoagulasi ditandai dengan PT dan aPTT memendek sementara fibrinogen dan D-dimer meningkat. Insidens kemoterapi menimbulkan trombus pertahun sekitar 11 %. Insidens tromboemboli vena pada pasien yang dirawat inap yang mendapat kemoterapi pada populasi Thailand ttinggi, terutama pada pemberian terapi. Sampai saat ini belum ada laporan mengenai insidens TEV pada pasien kanker limfoma yang menjalani kemoterapi di Indonesia.
Tujuan Penelitian : Menilai aktivitas koagulasi (D-dimer) dan sistem koagulasi (PT,aPTT, fibrinogen) pada pasien limfoma non Hodgkin yang mendapatkan kemoterapi R-CHOP
Metode Penelitian : Penelitian pre dan post prospektif pada pasien limfoma non Hodgkin yang menjalani kemoterapi dengan rejimen R-CHOP secara consecutive sampling di Ruang Rawat Inap Gedung A RSCM dan Ruang Rawat Inap RS Kanker Dharmais. Penelitian dilakukan pada April-Juni 2019. Pasien diambil darah dengan parameter aktivitas koagulasi (D-dimer) dan system koagulasi (PT, aPTT, fibrinogen). Analisis data untuk melihat perubahan rerata pre dan post kemoterapi dilakukan uji t berpasangan (distribusi normal) dan uji Wilcoxon (tidak terdistribusi normal).
Hasil Penelitian : Sebanyak 33 pasien dilibatkan dalam penelitian ini. Terdapat peningkatan D-dimer secara bermakna (p : 0.046), pemendekkan PT (0.048) dan aPTT (<0.001) secara bermakna, disertai penurunan kadar fibrinogen namun tidak signifikan secara statistika
Kesimpulan : Peningkatan D dimer secara bermakna, disertai pemendekkan PT dan aPTT secara bermakna, sedangkan fibrinogen mengalami penurunan walaupun tidak signifikan secara statistik. Hal ini menunjukkan kecenderungan pasien mengalami status hiperkoagulasi
<hr>
Background : Cytostatic chemotherapy is reported to increase coagulation activity (increased D-dimer) and change the hypercoagulable state

into hypercoagulation. Hypercoagulable state is a condition that has the potential for thrombosis (for example in cancer patients) characterized by changes in prethrombin coagulation activity (increase in prothrombin fragments 1-2 or TAT complex) with normal D-dimers. Hypercoagulation is characterized by PT and aPTT shortening while fibrinogen and D-dimer are increasing. The incidence of chemotherapy causes thrombus annually about 11%. The incidence of venous thromboembolism in hospitalized patients receiving chemotherapy in the high Thai population, especially in the administration of therapy. To date there have been no reports of TEV incidence in lymphoma cancer patients undergoing chemotherapy in Indonesia.
Objectives : Assess the activity of coagulation (D-dimers) and coagulation systems (PT, aPTT, fibrinogen) in non-Hodgkins lymphoma patients receiving R-CHOP chemotherapy
Methods : Pre and post prospective studies in non-Hodgkins lymphoma patients undergoing chemotherapy with the R-CHOP regimen by consecutive sampling in the Inpatient Room of Building A RSCM and the Inpatient Room of Dharmais Cancer Hospital. The study was conducted in April-June 2019. Patients were taken blood with parameters of coagulation activity (Ddimer) and coagulation system (PT, aPTT, fibrinogen). Data analysis to see changes in mean pre and post chemotherapy was performed paired t test (normal distribution) and Wilcoxon test (not normally distributed).
Results: A total of 33 patients were included in this study. There was a significant increase in D-dimer (p: 0.046), PT shortening (0.048) and aPTT (<0.001) significantly, accompanied by a decrease in fibrinogen levels but not statistically significant
Conclusion : D significantly increased dimer, accompanied by significant shortening of PT and aPTT, whereas fibrinogen decreased even though it was not statistically significant. This shows the tendency of patients to experience hypercoagulable state