Prediksi perubahan nilai hemoglobin pascaoperasi berdasarkan asupan cairan dan perdarahan pada Modified Radical Mastectomy (MRM) di RSUPN Cipto Mangunkusumo = Prediction of postoperative hemoglobin level changes based on fluid intake and blood loss in Modified Radical Mastectomy (MRM) at Cipto Mangunkusumo Hospital

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Abstrak

[ABSTRAK
Latar Belakang: Nilai hemoglobin masih dijadikan parameter dalam menentukan transfusi atau tidak walaupun tidak mengabaikan pertimbangan klinis. Namun, pada kenyataannya pemeriksaan nilai hemoglobin pascaoperasi sulit dilakukan karena keterbatasan alat dan membutuhkan waktu yang cukup lama sehingga ketika hasil pemeriksaan nilai hemoglobin didapatkan sudah tidak sesuai dengan kondisi terkini. Oleh karena itu dibutuhkan pendekatan berupa perkiraan dalam menetukan nilai hemoglobin pascaoperasi. Nilai perkiraan hemoglobin selama ini hanya terpaku dengan berapa jumlah perdarahan yang terjadi, padahal ada faktor lain yang memengaruhi, salah satunya pemberian cairan intraoperasi.
Metode: Penelitian ini merupakan desain analitik retrospektif dengan pengambilan data dari status pasien yang menjalani prosedur Modified Radical Mastectomy (MRM) di RSUPN Cipto Mangunkusumo sejak 1 Januari 2012 sampai 31 Desember 2014. Dilakukan pencatatan berupa identitas, umur, jenis kelamin, berat badan, nilai hemoglobin praoperasi, jumlah perdarahan intraoperasi, jumlah cairan intraoperasi, jumlah urin output intraoperasi, dan nilai hemoglobin pascaoperasi. Dilakukan analisis bivariat untuk masing-masing variabel dan kemudian akan dilanjutkan dengan analisis multivariat regresi linier.
Hasil: Dari 103 sampel penelitian didapatkan hubungan bermakna antara asupan cairan intraoperasi dengan perubahan nilai hemoglobin pascaoperasi (p=0.208, r=0.035) dan jumlah perdarahan intraoperasi dengan perubahan nilai hemoglobin pascaoperasi (p=0.297, r=0.002). Pada uji ANOVA didapatkan nilai p sebesar 0.039. Sebenarnya rumus layak untuk dibuat. Namun nilai Adjusted R square sebesar 3 % yang artinya persamaan yang diperoleh hanya mampu menjelaskan perubahan nilai hemoglobin pascaoperasi sebesar 3 %.
Simpulan: Perubahan nilai hemoglobin pascaoperasi tidak dapat dapat diprediksi dari asupan cairan dan perdarahan pada Modified Radical Mastectomy (MRM) di RSUPN Cipto Mangunkusumo.
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ABSTRACT
Background: Hemoglobin level is still a valid parameter to help decision in blood transfusion, eventhough its use is in conjunction with clinical decision. In reality, postoperative hemoglobin level is difficult to be done because of two reasons: the limitation of the tools and time consuming. At the moment the result is obtained, its result is different with current clinical condition. Therefore, we need tools to predict postoperative hemoglobin level. At present, hemoglobin prediction level is only looks at bleeding volume, eventhough there is still other factor such as intraoperative fluid intake.
Methods: This study is a retrospective analytic design using data from medical record of the patients

undergo the Modified Radical Mastectomy (MRM) procedure at Cipto Mangunkusumo hospital since January 1, 2012 to December 31, 2014. We record the identity, age, sex, weight, preoperative hemoglobin level, the volume of intraoperative blood loss, the volume of intraoperative fluids, the volume of intraoperative urine output, and postoperative hemoglobin level. Each variable will be analyzed using bivariate analysis, and then continued with multivariate linear regression analysis.
Results: Data from 103 samples showed a significant relationship between intraoperative fluid intake with the value of the postoperative hemoglobin ($p = 0.208$, $r = 0.035$), and the number of intraoperative blood loss with the value of the postoperative hemoglobin ($p = 0.297$, $r = 0.002$). ANOVA shows p value of 0.039. Eventhough the formula could be made, the Adjusted R square value of 3%, means the equation only could explain 3%changes in postoperative hemoglobin level.
Conclusions: Postoperative hemoglobin value changes can not predicted with fluid intake and blood loss in Modified Radical Mastectomy (MRM) at Cipto mangunkusumo hospital., Background: Hemoglobin level is still a valid parameter to help decision in blood transfusion, eventhough its use is in conjunction with clinical decision. In reality, postoperative hemoglobin level is difficult to be done because of two reasons: the limitation of the tools and time consuming. At the moment the result is obtained, its result is different with current clinical condition. Therefore, we need tools to predict postoperative hemoglobin level. At present, hemoglobin prediction level is only looks at bleeding volume, eventhough there is still other factor such as intraoperative fluid intake.
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