RELATIONSHIP BETWEEN MODIFIED GLASGOW PROGNOSTIC SCORE (mGPS) WITH STAGE AND HISTOPATHOLOGIC GRADING OF OVARIAN CANCER

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ABSTRACT

Background: Prognostic factors for ovarian cancer include residual tumor and chemotherapy response, but these parameters are not sufficient to predict accurate ovarian cancer prognoses. A new approach such as mGPS that use a combination of CRP and albumin can be used to assess an inflammatory response. With mGPS, an elevated CRP value and hypoalbuminemia are a poor prognosis.

Objective: to investigate the effect of mGPS on stage and histopathologic grading of ovarian cancer.

Method: The study design was a cross sectional study. The population of this study were patients with suspected ovarian cancer who underwent laparotomy surgical staging at RSUP Dr. Sardjito. The samples were patients with suspected ovarian cancer that have examined the *hs-CRP* level and albumin level preoperative,then underwent laparotomy surgical staging with histopathological results epithelial ovarian cancer. Data were analyzed using Chi Square test and logistic regression.

Results: there were 57 subjects with epithelial ovarian cancer consisting of 25 subjects (43.86%) with high mGPS and 32 subjects (56.14%) with low mGPS. The value of mGPS is associated with the stage of ovarian cancer (p = 0.000; RP = 4.000 CI 95% = 2.195 – 7.289). The results of the multivariate analysis showed that the most important factor in determining the stage was mGPS (p = 0.000; RP = 3.818 95% CI = 1.544-6.092). While the most important factor in determining histopathologic grading of ovarian cancer was the type of ovarian tumor (p = 0.000; RP = 7.339 95% CI = 4.960-9.718).

Conclusion: There was an association between mGPS and the stage of ovarian cancer. The histopathologic grading was not influenced by mGPS, but was influenced by the type of ovarian tumor.

Keywords: mGPS, Stage, Histopathologic grading, Ovarian Cancer, Epithelial Type

HUBUNGAN ANTARA *MODIFIED GLASGOW PROGNOSTIC SCORE (mGPS)* DENGAN STADIUM DAN DERAJAT DIFERENSIASI KANKER OVARIUM

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INTISARI

Latar belakang: Faktor prognosis kanker ovarium meliputi volume residual tumor dan respon terhadap kemoterapi, namun kedua parameter ini dinilai belum cukup signifikan memprediksi prognosis kanker ovarium secara akurat. Beberapa pendekatan baru seperti *mGPS* yang menggunakan kombinasi *CRP* dan albumin dapat digunakan untuk menilai adanya respon inflamasi. Dengan *mGPS*, adanya kenaikan nilai *CRP* dan kondisi hipoalbuminemia menjadi pertanda prognosis yang buruk.

Tujuan: untuk mengetahui pengaruh *mGPS* pada stadium dan derajat diferensiasi kanker ovarium.

Metode: rancangan penelitian adalah *cross sectional study*. Populasi penelitian adalah pasien tumor ovarium curiga ganas yang akan menjalani laparotomi pengangkatan massa tumor di RSUP Dr. Sardjito. Sampel penelitian adalah penderita tumor ovarium curiga ganas yang telah dilakukan pemeriksaan *hs-CRP* dan albumin preoperatif dan telah menjalani laparotomi pengangkatan massa tumor dengan hasil histopatologi kanker ovarium epitel. Data dianalisis dengan uji *Chi Square* dan regresi logistk.

Hasil: didapatkan 57 subjek dengan kanker ovarium tipe epitel yang terdiri dari 25 subjek (43,86%) dengan nilai *mGPS* yang tinggi dan 32 subjek (56,14%) dengan *mGPS* yang rendah. Nilai *mGPS* memiliki pengaruh terhadap stadium kanker ovarium (p = 0,000; RP = 4,000 *CI* 95% = 2,195 – 7,289). Dari hasil analisis multivariat menunjukkan faktor yang paling berperan menentukan stadium adalah *mGPS* (p = 0,000; RP = 3,818 *CI* 95% = 1,544-6,092). Sedangkan faktor yang paling berperan menentukan derajat diferensiasi adalah tipe tumor ovarium (p = 0,000; RP = 7,339 *CI* 95%= 4,960-9,718).

Kesimpulan: terdapat hubungan antara nilai *mGPS* dengan stadium kanker ovarium tipe epitel. Derajat diferensiasi kanker ovarium tidak dipengaruhi oleh nilai *mGPS*, tetapi dipengaruhi oleh tipe tumor ovarium.

Kata Kunci: *mGPS*, Stadium, Derajat Diferensiasi, Kanker Ovarium, Tipe Epitel