Hubungan Volume Flow dan Diameter Arteri Uterina dan Iliaka Interna dengan Perdarahan dan Temuan Intraoperasi serta Histopatologi pada Pasien Spektrum Plasenta Akreta = Relationship of Volume Flow and Diameter of Uterine and a with Intraoperative Bleeding and Findings, as well as Histopathology in Patients with Placenta Accreta Spectrum

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Abstrak

Latar Belakang: Perdarahan masif merupakan komplikasi paling banyak pada kasus spektrum plasenta akreta. Penyebab perdarahan terutama tergantung dari derajat keparahan spektrum plasenta akreta yang dapat diprediksi dari USG dan secara klinis dibuktikan pada saat operasi. Meskipun banyak faktor yang memengaruhi jumlah perdarahan saat operasi, namun memprediksi jumlah perdarahan melalui jumlah aliran darah yang masuk ke uterus adalah suatu patut diperhatikan. Oleh karena itu, penelitian ini bertujuan untuk memahami hubungan volume flow arteri uterina dan iliaka interna terhadap perdarahan, temuan intraoperasi dan histopatologi pada kasus SPA. Tujuan: Mengetahui hubungan volume flow dan diameter arteri uterina dan iliaka interna dengan perdarahan dan temuan intraoperasi serta histopatologi pada pasien spektrum plasenta akreta. Metode: Sebuah studi cross-sectional dilakukan pada 31 wanita, yang secara klinis didiagnosis dengan SPA. Pengukuran volume flow dan diameter arteri uterina dan iliaka interna dilakukan dengan USG Doppler sebelum operasi dilakukan. Temuan intraoperasi dan hasil histopatologi dikategorikan sesuai kriteria klinis dan histopatologi FIGO. Jumlah perdarahan intraoperasi diukur dan dicatat. Data kemudian dianalisis menggunakan Statistical Package for Social Sciences (SPSS) versi 25. Hasil: Dari 31 subjek penelitian didapatkan jumlah perdarahan intraoperasi sebanyak 1500 (1000-3000) mL. Sebagian besar tindakan yang dilakukan bersifat elektif (n=18[;]58,1%) dengan seksio sesarea diikuti oleh histerektomi sebanyak 19 kasus (61,3%). Temuan klinis intraoperasi yang paling sering ditemukan adalah kriteria klinis FIGO 1 sebanyak 15 kasus (48,4%). Hasil histopatologi terbanyak adalah kriteria histopatologi FIGO 2 sebanyak 19 kasus (61,3%). Rerata volume flow Arteri Iliaka Interna (p=0,002) berkorelasi dengan jumlah perdarahan intraoperasi dengan koefisien korelasi sebesar 0,525, sedangkan rerata volume flow Arteri Uterina tidak berkorelasi dengan jumlah perdarahan intraoperasi. Rerata diameter arteri uterina (p=0,034) berkorelasi positif dengan jumlah perdarahan intraoperasi dengan koefisien korelasi sebesar 0,383. Hal ini menunjukkan semakin besar volume flow arteri Iliaka Interna, semakin besar jumlah perdarahan intraoperasi. Ditemukan bahwa rerata diameter arteri iliaka interna memiliki perbedaan secara statistik dengan temuan klinis intraoperatif (p=0,044). Tidak ditemukan hubungan antara rerata volume flow dan diameter arteri uterina dan arteri iliaka interna dengan hasil histopatologi. Kesimpulan. Pengukuran volume flow arteri iliaka interna dan diameter arteri uterina dapat memberikan gambaran perkiraan jumlah perdarahan saat operasi kasus spektrum plasenta akreta.
.....Background: Massive bleeding is the most common complication in cases of the

placenta accreta spectrum (PAS). The cause of bleeding largely depends on the severity of the PAS, which can be predicted through ultrasound (USG) and clinically confirmed during surgery. Although many factors influence the amount of bleeding during surgery, predicting the amount of bleeding through the measurement of blood flow into the uterus is noteworthy. Therefore, this study aims to understand the relationship between the volume flow of the uterine and internal iliac arteries and bleeding, intraoperative findings, and histopathology in PAS cases. Objective: To determine the Relationship between Volume Flow and Diameter of Uterine and Internal Iliac Arteries with Intraoperative Bleeding and Findings, as well as Histopathology in Patients with Placenta Accreta Spectrum. Methods: A cross-sectional study was conducted on 31 women clinically diagnosed with PAS. Measurement of volume flow and diameter of the uterine and internal iliac arteries was performed using Doppler ultrasound before surgery. Intraoperative findings and histopathological results were categorized according to clinical and FIGO histopathological criteria. The amount of intraoperative bleeding was measured and recorded. The data were then analyzed using Statistical Package for Social Sciences (SPSS) version 25. Results: From 31 study subjects, the amount of intraoperative bleeding was found to be 1500 (1000-3000) mL. Most procedures were elective (n=18; 58.1%), with cesarean section followed by hysterectomy in 19 cases (61.3%). The most common intraoperative clinical finding was FIGO clinical criteria 1 in 15 cases (48.4%). The majority of histopathological results were FIGO histopathological criteria 2 in 19 cases (61.3%). The mean volume flow of the Internal Iliac Artery (p=0.002) correlated with the amount of intraoperative bleeding with a correlation coefficient of 0.525, while the mean volume flow of the Uterine Artery did not correlate with the amount of intraoperative bleeding. The mean diameter of the uterine artery (p=0.034) positively correlated with the amount of intraoperative bleeding with a correlation coefficient of 0.383. This indicates that the larger the volume flow of the Internal Iliac Artery, the greater the amount of intraoperative bleeding. It was found that the mean diameter of the internal iliac artery differed statistically with intraoperative clinical findings (p=0.044). No relationship was found between the mean volume flow and diameter of the uterine and internal iliac arteries with histopathological results. Conclusion: Measurement of the volume flow of the internal iliac artery and the diameter of the uterine artery can provide an estimate of the amount of bleeding during surgery in cases of the placenta accreta spectrum.