Korelasi antara luaran parameter sagital spinopelvik dan luaran ido pada pasien pasca operasi fusi dan stabilisasi tulang belakang torakal dan lumbal di Rumah Sakit dr. Cipto Mangunkusumo Jakarta pada tahun 2012-2014 = Correlation between sagittal spinopelvic parameters outcome and ido outcome of post thoracal and lumbar vertebrae stabilization and fusion patient in dr. Cipto Mangunkusumo Hospital Jakarta 2012-2014

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Abstrak

ABSTRAK
 Pendahuluan. Parameter spinopelvik merupakan parameter untuk mengukur keseimbangan poros tulang belakang terhadap ekstrimitas bawah pada penampang sagital. Parameter ini terdiri dari sagittal vertical axis (SVA), pelvic incidence (PI), pelvic tilt (PT), pelvic incidence (PI) dan diukur melalui X-ray whole spine lateral view dalam keadaan berdiri. Pengukuran parameter ini penting sebagai dasar analisa keseimbangan sagital dalam operasi rekonstruktif tulang belakang, karena dengan tidak adanya keseimbangan pada penampang sagital ini akan berakibat timbulnya adjacent segment degeneration yang akan memengaruhi luaran klinis. Hingga saat ini belum ada studi yang mengevaluasi hubungan antara luaran parameter spinopelvik dengan luaran klinis di indonesia.

Metode Penelitian. Penelitian ini adalah penelitian analitik potong lintang dengan subyek 19 pasien dewasa pasca operasi stabilisasi dan fusi tulang belakang torakal dan lumbal di Rumah Sakit Dr. Ciptomangunkusumo (RSCM) Jakarta pada tahun 2012-2014. Pasien tersebut dilakukan evaluasi X-ray parameter spinopelvik SVA, PI, PT, dan SS dilakukan penilaian skor Indeks Disabilitas Oswestry (IDO) pada saat 1 tahun pasca operasi. Lalu dilakukan analisis statistik dengan menggunakan uji hipotesis komparatif numerik dengan menggunakan pearson dimana dibandingkan luaran parameter spinopelvik SVA, PI, PT, dan SS dengan luaran fungsional skor IDO.

Temuan dan Diskusi Penelitian. Didapatkan hasil korelasi antara IDO dan SVA ($p<0,001$) ($r=0,866$). Korelasi antara IDO dan PI ($p=0,006$) ($r=0,603$). Korelasi antara IDO dan PT ($p=0,107$) ($r=0,382$). Korelasi IDO dan SS ($p=0,051$) ($r=0,454$).

Simpulan. Didapatkan korelasi kuat antara IDO dan SVA serta IDO dan PI. Tidak didapatkan korelasi antara IDO dan PT serta IDO dan SS. SVA dan PI merupakan parameter spinopelvik yang berpengaruh pada luaran pasca operasi fusi tulang belakang torakal dan lumbal.

ABSTRACT
 Introduction. Spinopelvic parameter is a parameter that used to measure the sagital balance of vertebrae in congruency with lower extrimity in sagital plane. This parametr is consist of sagittal vertical axis (SVA), pelvic incidence (PI), pelvic tilt (PT), pelvic incidence (PI) dan diukur melalui X-ray whole spine lateral view in standing position. Measurement of this parameter is important as basic analysis for achieve sagital balance in reconstructive operation of the vertebrae, because if the sagital balance is interupted will cause the adjacent segment degeneration that will influence the clinical outcomes. Up until now, there is no study that evaluate the spinopelvic parameter with the clinical outcomes in Indonesia.

Methods. This study is a cross-sectional analytic with 19 subject of adult patient that had undergo thoracal and lumbar fusion and stabilization in Rumah Sakit Dr. Ciptomangunkusumo (RSCM) Jakarta in 2012-2014. The subject was underwent x-ray evaluation of SVA, PI, PT, and SS. The patient also underwent evaluation of Indeks Disabilitas Oswestry (IDO) score in 1 year after operation. Then the statistical work was done with numeric comparative pearson test analysis to determine whether there is correlation between SVA, PI, PT, and SS with IDO score.

Result and Discussion. There is strong correlation between IDO and SVA ($p<0,001$) ($r=0,866$). Strong correlation between IDO and PI ($p=0,006$) ($r=0,603$). No correlation between IDO and PT ($p=0,107$) ($r=0,382$). No correlation between IDO and SS ($p=0,051$) ($r=0,454$).

Conclusion. Strong correlation is indicated in IDO and SVA, also in IDO and PI. There is no correlation between IDO and PT, also in IDO and SS. SVA and PI are the important spinopelvic parameter that have influence on clinical outcome in post thoracal and lumbar fusion and stabilization patient.
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