

**ABSTRAK****Perbandingan Tekanan Kateter Vena Sentral antara Saluran Distal, Medial, dan Proksimal dengan Metode Manometer Air****Cornellius Hendra Purnama Aria Sumantrie**

**Pendahuluan** : TVS di bangsal perawatan dianggap tidak sah nilai-nilainya terlebih bila saluran distalnya tersumbat sehingga pengukuran TVS tidak dilakukan. Dua postulat pengukuran TVS saling bertentangan dan membuat kebingungan di kalangan tenaga kesehatan. Dr Russo mengatakan nilai TVS lubang distal, medial, dan proksimal tidak berbeda, namun disangkal oleh Susan S. Scott yang membuktikan kebalikannya. Diperlukan pembuktian dari kedua postulat sebagai solusi untuk pengukuran TVS di bangsal perawatan.

**Obyek** : Pengukuran serta analisa TVS lubang distal, medial dan proksimal di hari ke “nol” sampai hari kelima dilakukan hampir bersamaan untuk mengurangi bias dan kelancaran dirawat setiap 12 – 24 jam sekali.

**Metode** : Penelitian retrospektif ini menggunakan 49 sampel untuk mendapatkan nilai TVS saluran distal, medial dan proksimal di hari ke “nol” sampai hari kelima. Nilai selisih tersebut dianalisis secara statistik untuk membuktikan perbedaannya bermakna atau tidak dalam pengukuran TVS sekaligus membuktikan postulat mana yang lebih benar.

**Hasil** : Karakteristik demografi dari 49 sampel yang dihasilkan cukup mewakili populasi. Pada uji statistik hari ke “nol” nilai pengukuran TVS dianggap sebagai uji tera dengan selisih nol. Pada uji statistik hari kelima, 91,8% sampel berselisih nol sedangkan 2 – 4% berselisih 0,2 – 1,0 cm H<sub>2</sub>O. Hal itu menyimpulkan tidak ada perbedaan yang bermakna dengan CI 95%, skala korelasi 0,998 dan 0,999 menunjukkan hubungan yang sangat kuat dari ketiga lubang distal, medial dan proksimal untuk menghasilkan nilai selisih nol.

**Kesimpulan** : Nilai TVS dari saluran distal, medial, dan proksimal dalam penelitian ini tidak menghasilkan perbedaan bermakna yang konsisten pada hari ke “nol” sampai hari kelima dan dirumuskan menjadi  $P_{\text{distal}} = P_{\text{medial}} = P_{\text{proksimal}}$  (cm H<sub>2</sub>O).

**Kata kunci** : Tekanan KVS, Tiga Saluran, Selisih Tekanan.

**ABSTRACT****Comparison of Central Vein Pressure Between Distal, Medial, and Proximal Lumens with Water Manometer Method****Cornellius Hendra Purnama Aria Sumantrie**

**Introduction:** CVP in the care ward is considered invalid value especially if the distal lumen has blocked so that CVP measurements are not performed. The two CVP measurement postulates contradict each other and create confusion among health workers. Dr Russo said the distal, medial, and proximal CVP values did not differ, but were denied by Susan S. Scott who proved the opposite. Proof of both postulates is needed as a solution for the measurement of CVP in the care ward.

**Object:** Distal, medial and proximal lumens of CVP measurements and analyzes from “zero” day to fifth day were performed almost simultaneously to reduce bias and smoothness treated every 12 – 24 hours.

**Method:** This retrospective study used 49 samples to get distal, medial and proximal CVP values from “zero” day to fifth day. The difference values were analyzed statistically to prove the difference has been significant or not in the measurement of CVP while proving which postulates were more correct.

**Results:** The demographic characteristics of the 49 samples were produced quite representative of the population. On the “zero” day statistical test the CVP measurement value is considered as a calibration test with zero difference. In the fifth day statistical test, 91.8% of the samples were zero difference, while 2 – 4% were 0.2 - 1.0 cm H<sub>2</sub>O. It concluded that there was no significant difference with 95% CI, the correlation scale of 0.998 and 0.999 showed a very strong relationship between the three distal, medial and proximal lumens to produce a zero difference value.

**Conclusion:** CVP values of the distal, medial, and proximal lumens in this study did not produce consistent significant differences from “zero” day to fifth day and were formulated as  $P_{\text{distal}} = P_{\text{medial}} = P_{\text{proximal}}$  (cm H<sub>2</sub>O).

**Keywords :** CVP Pressure, Three Lumen, Different Pressure.