

## **Perbedaan Berat Jenis Cairan Pleura**

### **Cara Hidrometer dan Dipstik**

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### **ABSTRAK**

Pemeriksaan berat jenis cairan pleura dapat dilakukan dengan metode hidrometer dan dipstik. Pemeriksaan berat jenis dengan hidrometer menggunakan skala hidrometer 1.000 – 1.060 (suhu tera 20oc), pembacaan dipstik menggunakan skala warna. Tujuan penelitian untuk mengetahui perbedaan berat jenis cairan pleura dengan cara hidrometer dan dipstik.

Jenis penelitian analitik. Sampel sampling acak dari total populasi pasien rawat inap RSUP Dr Kariadi bulan November sampai Desember 2016, diperiksa menggunakan hidrometer dan dipstik. Sampel yang tidak memenuhi syarat dieksekusi sehingga mendapatkan 61 sampel. Data dianalisa dengan uji *Kolmogorov-Smirnov* dilanjutkan dengan uji *Wilcoxon*.

Hasil terendah hidrometer 1.012 dan tertinggi 1.027, dengan rerata dan simpang baku  $1.023 \pm 0.003$ , sedangkan hasil terendah dipstik 1.005 dan tertinggi 1.020, dengan rerata dan simpang baku  $1.013 \pm 0.003$ . Hal ini menunjukkan hasil berat jenis cairan pleura hidrometer lebih tinggi dibandingkan dipstik. Uji normalitas data menggunakan *Kolmogorov-Smirnov* menunjukkan sebaran data tidak normal ( $p < 0,001$ ). Hasil uji beda *Wilcoxon* menunjukkan adanya perbedaan berat jenis cairan pleura dari kedua metode dengan nilai  $p < 0,001$ . Kesimpulan terdapat perbedaan bermakna antara pemeriksaan berat jenis cairan pleura cara hidrometer dan dipstik.

Kata kunci: Metode pemeriksaan, berat jenis cairan pleura

## **The Distinction of Diagnostic Test of Pleura Density: Hydrometer and Dipstick Methods**

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### **ABSTRACT**

Diagnostic test of pleural fluid density can be conducted through hydrometer and dipstick methods. The hydrometer method uses the scale between 1,000 and 1,060 (with calibrating temperature of 20 C), while the dipstick method uses the scale of colors. This research is aimed to distinguish pleural fluid density through those two methods.

This research constitutes analytical research. Samples were taken from random sampling technic within total population of hospitalized patients at RSUP Dr.Kariadi during November 2016 to December 2016. Samples were both checked by hydrometer and dipstick test. Samples that cannot meet the requirements were excluded, so that the research undertook 61 samples. Data collections were analyzed with Kolmogorov-Smirnov then continued with Wilcoxon test.

As the result, the diagnostic tests have measured an average score of the hydrometer amounted to 1,023, and 1,013 with the dipstick method. These results show that the density measurement of pleural fluid with the hydrometer is higher than the dipstick. Normality data test using Kolmogorov-Smirnov concludes that the data is not well distributed ( $p<0,001$ ). Furthermore, non-parametric study of the Wilcoxon test indicates that both tests had a significant variation ( $p<0,001$ ). The research concludes that there was distinction of pleural fluid diagnostic with the hydrometer and the dipstick methods.

Keywords: Diagnostic test, Pleural fluid density