Ukuran ventrikel serebral neonatus aterm normal berdasarkan pemeriksaan ultrasonografi = Ventricle size in healthy full term neonate by cranial ultrasound

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Abstrak

[ABSTRAK
Hidrosefalus adalah kelainan susunan saraf pusat yang ditandai dengan pelebaran sistem ventrikel. Diperlukan data mengenai ukuran ventrikel serebral normal sebagai batas ambang untuk mendiagnosis pelebaran ventrikel serebral awal. Tujuan penelitian ini untuk mengetahui ukuran ventrikel serebral neonatus aterm normal dan melihat gambaran korelasi parameter pengukuran ventrikel serebral. Penelitian dilakukan terhadap 55 neonatus aterm normal menggunakan modalitas ultrasonografi untuk mendapatkan ukuran ventrikel serebral. Data kuantitatif yang diperoleh dihitung nilai rerata dan digunakan analisis bivariat Pearson/ Spearman untuk melihat gambaran korelasi parameter ukuran ventrikel serebral. Didapatkan rerata ukuran lebar kornu anterior ventrikel lateralis, indeks ventrikel, lebar ventrikel III, jarak talamo-oksipital dan ukuran ventrikel IV. Terdapat korelasi bermakna (p<0,05) antara: lebar kornu anterior kanan dengan indeks ventrikel kanan dengan arah korelasi positif dan kekuatan korelasi sedang (r= 0,506) dan lebar kornu anterior kiri dengan indeks ventrikel kiri dengan arah korelasi positif dan kekuatan korelasi sedang (r=0,488). Tidak terdapat korelasi bermakna (p>0,05) antara : lebar kornu anterior ventrikel lateralis kanan dengan jarak talamo-oksipital kanan dan dari lebar kornu anterior ventrikel lateralis kiri dengan jarak talamo-oksipital kiri. Rerata ukuran ventrikel serebral neonatus aterm normal: lebar kornu anterior ventrikel lateralis 1,50 mm (0,8-3,00 mm); indeks ventrikel 6,52 mm (3,39-12,10 mm); lebar ventrikel III 1,87 mm (0,93-3,80 mm); jarak talamo oksipital 14,82 ±1,69 mm dan ukuran ventrikel IV 4,06 ± 0,53 mm. Ukuran kornu anterior ventrikel lateralis yang besar biasanya disertai indeks ventrikel yang besar pula. Tidak terdapat korelasi antara lebar kornu anterior ventrikel lateralis dengan jarak talamo-oksipital.
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ABSTRACT
Cerebral ventricular dilation is a sign of hydrocephalus. Late diagnosis and late treatment of hydrocephalus can cause parenchymal damage and even death. To diagnose early dilation of cerebral ventricles in neonates required data of the size of the cerebral ventricles as the normal threshold. The purpose of this study was to determine the size of the cerebral ventricles of normal full-term neonates and the correlation parameter ventricular measurement. Study of 55 normal full-term neonates by ultrasonography to establish measurement of parameters ventricular. Quantitative data were obtained calculated mean values and to determinate the correlation parameter cerebral ventricle measurements used bivariate analysis Pearson/ Spearman. Data obtained cerebral ventricular size parameters consisting of the anterior horn width lateral ventricle, ventricular index, the width of the third ventricle, talamo-occipital distance and the size of the fourth ventricle in healthy full-term neonates. There was significant (p <0.05) positive and moderate correlation between: right anterior horn width lateral ventricle with right ventricular index (r = 0.506) as well as left anterior horn width lateral ventricle with left ventricular index (r = 0.488). There were no significant correlation (p> 0.05) between: right anterior horn width lateral ventricle with right talamo-

occipital distance and left anterior horn width lateral ventricle with left talamo-occipital distance. The mean size of the cerebral ventricles of healthy full-term neonates are: anterior horn width of the lateral ventricle 1.50 mm(0.8 to 3.00 mm); ventricular index 6.52 mm (3.39 to 12.10 mm); third ventricular width 1.87 mm (0.93 to 3.80 mm); Talamo-occipital distance 14.82 ± 1.69 mm and 4.06 ± fourth ventricle size of 0.53 mm. The greater width of the anterior horn of the lateral ventricle is usually accompanied by greater the ventricular index. There is no correlation between anterior horn width lateral ventricle with the talamo-occipital distance.;Cerebral ventricular dilation is a sign of hydrocephalus. Late diagnosis and late treatment of hydrocephalus can cause parenchymal damage and even death. To diagnose early dilation of cerebral ventricles in neonates required data of the size of the cerebral ventricles as the normal threshold. The purpose of this study was to determine the size of the cerebral ventricles of normal full-term neonates and the correlation parameter ventricular measurement. Study of 55 normal full-term neonates by ultrasonography to establish measurement of parameters ventricular. Quantitative data were obtained calculated mean values and to determinate the correlation parameter cerebral ventricle measurements used bivariate analysis Pearson/ Spearman. Data obtained cerebral ventricular size parameters consisting of the anterior horn width lateral ventricle, ventricular index, the width of the third ventricle, talamo-occipital distance and the size of the fourth ventricle in healthy full-term neonates. There was significant ($p < 0.05$) positive and moderate correlation between: right anterior horn width lateral ventricle with right ventricular index ($r = 0.506$) as well as left anterior horn width lateral ventricle with left ventricular index ($r = 0.488$). There were no significant correlation ($p > 0.05$) between: right anterior horn width lateral ventricle with right talamo-occipital distance and left anterior horn width lateral ventricle with left talamo-occipital distance.
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