outcome was verified in patients with modified Rankin Scale score ≥4-5 on the 21st day. Elaboration of prognostic model was made by logistic regression and ROC-analysis. *Results:* Out of 102 stroke patients, 49 (48,0%) have PFO. Near 9 models were obtained. The model with the largest area under the curve (AUC=0,87) was: β=-0,327*NIHSS+0,184*DTP-3,85. Significance level of Hosmer-Lemeshow-test for selected model p=0,5115, percent concordant=76,5. Cut-off value of β>-0,212 predicts PFO with sensitivity=79,6% and specificity=77,4%. *Conclusions:* Elaborated prognostic model might be a powerful tool for predicting PFO after HHS and improving effectiveness of treatment.

PREDICITIVE VALUE OF PERIHEMATOMAL EDEMA IN ACUTE PERIOD OF HAEMORRHAGIC HEMISPHERIC STROKE

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Background: Elaboration of computer tomographic criteria to predict early outcome after hemorrhagic hemispheric stroke (HHS) is a very important and relevant in modern angioneurology that can help the practicioners to identify candidates for neurosurgical intervention and improve effectiveness of treatment approaches. We therefore verified the prognostic value of perihematomal edema for prediction outcome after HHS. *Methods:* 60 patients (mean age 64,5±1,5 years) were studied within first 21 days after clinical onset of HHS. Clinical examination included evaluation by National Institute of Health Stroke Scale (NIHSS) and Glasgow Coma Scale. CT of the brain was done at admission during the first 24 hours after clinical onset of AISS. The cumulative volume of intracerebral hemorrhge (VICH) and perihematomal edema (PHE) was calculated by ellipsoid formula using parameters of CT: VICH+PHE (mL) = (a*b*c)/3. Elaboration of prognostic criteria was made by logistic regression and ROC-analysis. *Results:* Out of 60 stroke patients, 10 (16,7%) died. Cut-off value of VICH+PHE>92,3 mL predicts ELO with sensitivity=80,0% and specificity=94,0% (AUC=0,86). Significance level of Hosmer-Lemeshow-test for selected model was p=0,1913, percent concordant=91,7. *Conclusions:* Cumulative computer tomographic parameter (VICH+PHE) characterized by high sensitivity and specificity for prediction outcome after HHS and may be used for elaboration of multivariate statistical model.

ELABORATION OF MULTIVARIATE MODEL FOR PREDICTION FUNCTIONAL OUTCOME After HEMORRHAGIC HEMISPHERIC STROKE USING CLINICAL PARAMETERS AND INFLAMMATORY ACTIVATION

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Background: Elaboration of statistical models to predict functional outcome (FO) after hemorrhagic hemispheric stroke (HHS) is a very important and relevant in modern angioneurology that can help the practicioners to identify candidates for neurosurgical intervention and improve effectiveness of treatment approaches. We therefore elaborated new statistical for prediction FO after HHS using clinical parameters and markers of inflammatory activation. *Methods:* 101 patients (mean age 64,8±1,1 years) were studied within first 21 days after clinical onset of HHS. Clinical examination included evaluation by National Institute of Health Stroke Scale (NIHSS). Neutrophil-lymphocyte ratio (NLR) was calculated on at admission. Poor functional outcome (PFO) was verified in patients with modified Rankin Scale score ≥4-5 on the 21st day. Elaboration of prognostic model was made by logistic regression and ROC-analysis. *Results:* Out of 101 stroke patients, 47 (46,5%) have PFO. Near 10 models were obtained. The model with the largest area under the curve (AUC=0,881) was: β=-0,338*NIHSS+0,14*NLR-4,42. Significance level of Hosmer-Lemeshow-test for selected model was p=0,5552, percent concordant=79,0. Cut-off value of β >-0,6368 predicts PFO with sensitivity=89,8% and specificity=71, 7%. *Conclusions:* Elaborated prognostic model might be a powerful tool for predicting PFO after HHS and improving effectiveness of treatment.