30613020\_PD.txt

Title: [Effects of propofol sedation on <P 28> psychological stress </> in surgical patients under epidural].

Publication Type: Randomized Controlled Trial

Journal-Name:Nan fang yi ke da xue xue bao = Journal of Southern Medical University

Journal ID: 101266132

Publication date: 2019/02/23 06:00 [medline]

OBJECTIVE: To explore the effects of propofol sedation on <P 28> psychological stress </> in patients undergoing surgery under epidural anesthesia. METHODS: Sixty patients scheduled to undergo elective ileostomy closure under epidural anesthesia were randomized into propofol sedation group and control group (n=30). The patients in the sedation group received a loading dose of propofol of 0.6 mg.kg(- 1). h(- 1) followed by a maintenance dose with continuous infusion of 3 mg.kg(- 1). h(- 1) given after the [T Observer's Assessment of <P 0> Alertness </> / <P 0> Sedation </> (OAA/S)] score reached 2-3. An equivalent volume of normal saline was administered in patients in the control group. The patients' preoperative and intraoperative <P 0, 28> anxiety </> scores were assessed with the State <P 0, 28> Anxiety </> Inventory (SAI) on the day before and on the first day after the surgery, respectively. The mean <P 0> blood pressure </> (MBP), <P 0> heart rate (HR) </>, <P 0> SpO2 </>, [T Observer's Assessment of <P 0> Alertness </> / <P 0> Sedation </> (OAA/S)], and the indicators of <P 28> psychological stress </> of brain functional state of the patients (including the <P 0> wavelet </> index [WLi], <P 0, 28> anxiety </> index [ANXi], <P 32> comfortable </> index [CFi] and <P 0> pain </> index [Pi]) were recorded at 5 min after entering the operating room (T0), at the time of lumbar puncture (T1) and change to supine position after the puncture (T2), at 20 s (T3), 40 s (T4), and 60 s (T5) after intravenous administration, and at 2 min (T6), 4 min (T5), 6 min (T8), 8 min (T9), 10 min (T10) and 40 min (T11) after skin incision. The patient's <P 32> satisfaction </> with anesthesia was assessed with the Visual Analog Scale (VAS) score on the first day after the operation. Serum <P 0> cortisol </> level was measured before anesthesia and at the end of operation to calculate the changes in cortisol level. RESULTS: The two groups of patients were comparable for preoperative SAI scores (P&gt;0.05); The patients in the sedation group appeared to have lower intraoprative SAI scores, but this difference was not statistically significant (P=0.05). Mean <P 0> blood pressure (MBP) </>, <P 0> heart rate (HR) </>, and <P 0> SpO2 </> at the time points from T6 to T10 and [T Observer's Assessment of <P 0> Alertness </> / <P 0> Sedation </> (OAA/S)], <P 0> wavelet </> index [WLi], <P 0, 28> anxiety </> index [ANXi], <P 32> comfortable </> index [CFi], and <P 0> pain </> index [Pi] at the time points from T6 to T11 were significantly lower in the sedation group (all P &lt; 0.05), and these parameters were not significantly different between the two groups at the other time points (all P&gt;0.05). The patient <P 32> satisfaction </> scores were significantly higher in the sedation group (Z=2.07, P &lt; 0.05). Compared with the preoperative levels, serum <P 0> cortisol </> level at the end of the operation was increased in the sedation group but lowered in the control group, and the variations of serum <P 0> cortisol </> level differed significantly between the two groups (t=4.75, P &lt; 0.01). CONCLUSIONS: Intraoperative propofol sedation can alleviate the patients' <P 0, 28> anxiety </>, improve the <P 32> comfort </> level, and lessen <P 0, 28> physiological stress </> during surgeries under epidural anesthesia.

30614901\_PD.txt

Title: <P 0>(S3) Corneal Endothelial Cell Density <P 0> and Morphology </> After Phacoemulsification in Patients With Primary Open-Angle Glaucoma and Cataracts: 2-Year Results of a Randomized Multicenter Trial.

Publication Type: Multicenter Study

Journal-Name:Cornea

Journal ID: 8216186

Publication date: 2019/01/08 06:00 [entrez]

PURPOSE: To evaluate <P 0>(S3) corneal endothelial cell density (ECD) <P 0> and morphology </> 2 years after phacoemulsification in subjects from the COMPASS trial (ClinicalTrials.gov, NCT01085357) who had mild-to-moderate primary open-angle glaucoma and visually significant cataracts. METHODS: The <P 0> central corneal endothelium </> was evaluated by serial specular microscopy at 0 to 24 months. <P 0> Endothelial Cell Density (ECD) </>, coefficient of variation, and percentage of <P 0> hexagonal cells </> were evaluated by a central image analysis reading center and <P 0> central corneal thickness (CCT) </> was evaluated by ultrasound pachymetry. RESULTS: Of 131 subjects who underwent routine phacoemulsification, analyzable endothelial images at 24 months were available for 126 subjects (96.2%). Mean +/- SD central ECD at baseline was 2453 +/- 359 cells/mm, decreasing by 10% +/- 14% to 2195 +/- 517 cells/mm at 3 months (P < 0.001) but stabilizing thereafter with mean <P 0> endothelial cell </> loss (ECL) from baseline to 24 months of 9% +/- 13% (P < 0.001). Twelve (9.5%) and 10 (7.9%) subjects experienced >30% <P 0> endothelial cell </> loss (ECL) at 12 and 24 months, respectively. Neither coefficient of variation nor percentage of hexagonal cells changed significantly from baseline at any time point. Mean <P 0> central corneal thickness (CCT) </> was similar at baseline (550 +/- 35 mum) and at 12 months (551 +/- 37 mum) and 24 months (555 +/- 35 mum). Age was significantly associated with <P 0> endothelial cell </> loss (ECL) after cataract surgery (P = 0.02), but baseline intraocular pressure, number of <P 36> glaucoma medications </>, and <P 0> central corneal thickness (CCT) </> were not. Similar results were observed in patients who underwent CyPass micro-stent implantation accompanying phacoemulsification. CONCLUSIONS: Phacoemulsification in eyes with mild-to-moderate primary open-angle glaucoma results in early <P 0> endothelial cell </> loss (ECL), with <P 0> Endothelial Cell Density (ECD) </> stabilizing after 3 months and no effect on other <P 0> endothelial stress </> markers up to 2 years postoperatively.

30615491\_PD.txt

Title: Taping to Improve <P 0> Scapular Dyskinesis </>, <P 0> Scapular Upward Rotation </>, and <P 0> Pectoralis Minor Length </> in Overhead Athletes.

Publication Type: Randomized Controlled Trial

Journal-Name:Journal of athletic training

Journal ID: 9301647

Publication date: 2019/02/15 06:00 [medline]

CONTEXT: Deviations in scapular motions and subsequent alterations in associated soft tissues are thought to contribute to overuse shoulder injuries in overhead athletes. Whereas rigid and Kinesio taping are recommended for preventing these injuries, high-level evidence from clinical trials is still needed. OBJECTIVE: To determine and compare the short-term effects of rigid and Kinesio taping on <P 0> scapular dyskinesis </>, <P 0> scapular upward rotation </>, and <P 0> pectoralis minor length </> in asymptomatic overhead athletes. DESIGN: Randomized controlled trial. SETTING: Athletic training rooms. PATIENTS OR OTHER PARTICIPANTS: Seventy-two elite asymptomatic overhead athletes (age = 17.00 +/- 4.09 years, height = 1.75 +/- 0.11 m, mass = 67.26 +/- 15.25 kg, body mass index = 21.80 +/- 3.00). INTERVENTION(S): We randomly assigned participants to 1 of 4 groups: rigid taping, Kinesio taping, placebo, or control (no taping). For the first 3 groups, we applied tape to the shoulder and scapular region. MAIN OUTCOME MEASURE(S): We evaluated all groups for observable <P 0> scapular dyskinesis </> using the scapular dyskinesis test, <P 0> scapular upward rotation </> using a digital inclinometer, and <P 0> pectoralis minor length </> using the pectoralis minor index at baseline, immediately after taping, and at 60 to 72 hours after taping. RESULTS: The <P 0> scapular dyskinesis </> percentage ( P < .05) decreased and the <P 0> pectoralis minor </> index ( P < .001) increased immediately and at 60 to 72 hours after taping in the rigid-taping and Kinesio-taping groups. We observed no differences among groups for the change in the <P 0> pectoralis minor </> index (P > .05). <P 0> Scapular upward rotation </> did not change after taping in any group (P > .05). CONCLUSIONS: Rigid or Kinesio taping of the shoulder and scapular region improved <P 0> scapular dyskinesis </> and <P 0> pectoralis minor length </> but did not alter <P 0> scapular upward rotation </>. Short-term rigid and Kinesio taping may help improve <P 0> scapular dyskinesis </> and <P 0> pectoralis minor length </> in overhead athletes.

30616596\_PD.txt

Title: A randomized placebo-controlled trial of delayed-release dimethyl fumarate in patients with relapsing-remitting multiple sclerosis from East Asia and other countries.

Publication Type: Journal Article

Journal-Name:BMC neurology

Journal ID: 100968555

Publication date: 2019/01/09 06:00 [entrez]

BACKGROUND: Delayed-release dimethyl fumarate (DMF) has demonstrated efficacy and a favorable benefit-risk profile in phase 2 and 3 studies that enrolled predominantly white patients with relapsing-remitting multiple sclerosis (RRMS). In this study (APEX, Part I), we evaluated the efficacy/safety outcomes of DMF in a predominantly East Asian population of patients with RRMS. METHODS: In this 24-week, randomized, double-blind, placebo-controlled phase 3 study, 225 patients, 142 of which were East Asian (63.4%), were enrolled: Japan (n = 114), South Korea (n = 20), Taiwan (n = 8), the Czech Republic (n = 42), and Poland (n = 40). Key exclusion criteria included diagnosis of neuromyelitis optica spectrum disorder. Stratified by country, patients were randomized 1:1 to receive DMF 240 mg twice daily or placebo. Clinical assessments, including neurological examination and [T EDSS] scoring, were conducted at baseline and at weeks 12 and 24. RESULTS: A total of 213 patients (95.1%) completed the study. From weeks 12 - 24, the total number of new <P 0> gadolinium-enhancing (Gd(+)) lesions </> was reduced by 84% (p < 0.0001) in DMF compared with placebo. For the secondary endpoint, from baseline to week 24, the total number of new <P 0> gadolinium-enhancing (Gd(+)) lesions </> was reduced by 75% and the mean number of new/newly enlarging <P 0> T2 hyperintense lesions </> was reduced by 63% (both p < 0.0001). <P 0> Flushing </> and <P 0> flushing-related symptoms </>, and <P 0> gastrointestinal events </> were <P 38> adverse events </> related to DMF treatment. Efficacy and safety results in the Japanese subgroup and the East Asian subgroup (which included patients from Japan, Taiwan, and South Korea) were consistent with the overall study population. CONCLUSION: The strong efficacy and favorable benefit-risk profile of DMF extends to Japanese, and more broadly, East Asian patients with RRMS. TRIAL REGISTRATION: This trial is registered on ClinicalTrials.gov (identifier: NCT01838668 ), April 20, 2013 (retrospectively registered). The registration can be found at the following URL: https://clinicaltrials.gov/ct2/show/NCT01838668.

30618445\_PD.txt

Title: Comparison of the effectiveness of two-dose versus three-dose sulphadoxine-pyrimethamine in preventing <P 38> adverse pregnancy outcomes </> in Nigeria.

Publication Type: Journal Article

Journal-Name:Journal of vector borne diseases

Journal ID: 101212761

Publication date: 2019/02/12 06:00 [medline]

Background & objectives: : Three doses of intermittent preventive treatment with sulphadoxine-pyrimethamine (IPTp-SP) has been adopted as the new recommendation for prevention of <P 0> malaria </> in pregnancy. This study evaluated the effectiveness of two-dose versus three-dose of SP for IPTp-SP in the prevention of <P 0> low birth weight (LBW) </> and <P 0> malaria parasitaemia </>. Methods: : An open, randomized, controlled, longitudinal trial was conducted in a secondary level hospital in Nsukka region of Enugu State, Nigeria. A sample of 210 pregnant women within gestational ages of 16-24 wk were recruited at antenatal clinics and equally randomized to either a two-dose SP or three-dose SP group. The primary endpoints were <P 0> low birth weight (LBW) </>, <P 0>(E1) peripheral, and <P 0> placental parasitaemia </>, while the secondary endpoints were <P 0> maternal anaemia </>, <P 0> pre-term birth </>, <P 0> clinical malaria </> and <P 38> adverse effects </> of SP. Results: : Among 207 cases followed till delivery, the prevalence of <P 0> parasitaemia </> was lower in three-dose group than in two-dose group for both <P 0>(E1) peripheral {(9.3% versus 27.8%)} and <P 0> placental {(10.6% versus 25.6%)} parasitaemia </>. The adjusted odds ratios (aOR) were 0.15 [95% confidence interval (CI), 0.05 - 0.45] and 0.17 (95% CI, 0.06-0.51), respectively. The prevalence of <P 0> low birth weight (LBW) </> was also lower in three-dose (3.5%) than in two-dose (12.2%) group (aOR, 0.15; 95% CI, 0.04-0.63); however, the prevalence of <P 0> maternal anaemia </>, <P 0> pre-term births </>, <P 0> clinical malaria </> and SP <P 38> adverse effects </> were similar between the two arms of treatment. Interpretation & conclusion: : Addition of a third SP dose to the standard two-dose SP for IPTp led to improved reductions in the risk of some <P 38> adverse pregnancy outcomes </>.

30620370\_PD.txt

Title: Effect of Medication Co-payment Vouchers on <P 0> P2Y12 Inhibitor Use </> and <P 0, 1> Major Adverse Cardiovascular Events </> Among Patients With Myocardial Infarction: The ARTEMIS Randomized Clinical Trial.

Publication Type: Multicenter Study

Journal-Name:JAMA

Journal ID: 7501160

Publication date: 2019/02/15 06:00 [medline]

Importance: Despite guideline recommendations, many patients discontinue P2Y12 inhibitor therapy earlier than the recommended 1 year after myocardial infarction (MI), and higher-potency P2Y12 inhibitors are underutilized. Cost is frequently cited as an explanation for both of these observations. Objective: To determine whether removing co-payment barriers increases <P 0> P2Y12 inhibitor persistence </> and lowers risk of <P 0, 1> major adverse cardiovascular events (MACE) </>. Design, Setting, and Participants: Cluster randomized clinical trial among 301 hospitals enrolling adult patients with acute MI (June 5, 2015, through September 30, 2016); patients were followed up for 1 year after discharge (final date of follow-up was October 23, 2017), with blinded adjudication of <P 0, 1> major adverse cardiovascular events (MACE) </>; choice of P2Y12 inhibitor was per clinician discretion. Interventions: Hospitals randomized to the intervention (n = 131 [6436 patients]) provided patients with co-payment vouchers for clopidogrel or ticagrelor for 1 year (median voucher value for a 30-day supply, $137 [25th-75th percentile, $20-$339]). Hospitals randomized to usual care (n = 156 [4565 patients]) did not provide study vouchers. Main Outcomes and Measures: Independent coprimary outcomes were patient-reported <P 32> persistence </> with P2Y12 inhibitor (defined as continued treatment without gap in use >/=30 days) and <P 0, 1> major adverse cardiovascular events (MACE) </> (<P 1> death </>, <P 0> recurrent MI </>, or <P 0> stroke </>) at 1 year among patients discharged with a prescription for clopidogrel or ticagrelor. Results: Among 11001 enrolled patients (median age, 62 years; 3459 [31%] women), 10102 patients were discharged with prescriptions for clopidogrel or ticagrelor (clopidogrel prescribed to 2317 [36.0%] in the intervention group and 2497 [54.7%] in the usual care group), 4393 of 6135 patients (72%) in the intervention group <P 32> used the voucher </>, and follow-up data at 1 year were available for 10802 patients (98.2%). Patient-reported <P 32> persistence </> with P2Y12 inhibitors at 1 year was higher in the intervention group than in the control group (unadjusted rates, 5340/6135 [87.0%] vs 3324/3967 [83.8%], respectively; P < .001; adjusted difference, 2.3% [95% CI, 0.4% to 4.1%]; adjusted odds ratio, 1.19 [95% CI, 1.02 to 1.40]). There was no significant difference in <P 0, 1> major adverse cardiovascular events (MACE) </> at 1 year between intervention and usual care groups (unadjusted cumulative incidence, 10.2% vs 10.6%; P = .65; adjusted difference, 0.66% [95% CI, -0.73% to 2.06%]; adjusted hazard ratio, 1.07 [95% CI, 0.93 to 1.25]). Conclusions and Relevance: Among patients with MI, provision of vouchers to offset medication co-payments for P2Y12 inhibitors, compared with no vouchers, resulted in a 3.3% absolute increase in patient-reported <P 32> persistence </> with P2Y12 inhibitors and no significant reduction in 1-year <P 0, 1> major adverse cardiovascular events (MACE) </> outcomes. Trial Registration: ClinicalTrials.gov Identifier: NCT02406677.

30620371\_PD.txt

Title: Effect of Low-Dose Intracoronary Alteplase During Primary Percutaneous Coronary Intervention on <P 0> Microvascular Obstruction </> in Patients With Acute Myocardial Infarction: A Randomized Clinical Trial.

Publication Type: Journal Article

Journal-Name:JAMA

Journal ID: 7501160

Publication date: 2019/02/15 06:00 [medline]

Importance: Microvascular obstruction commonly affects patients with acute ST-segment elevation myocardial infarction (STEMI) and is associated with adverse outcomes. Objective: To determine whether a therapeutic strategy involving low-dose intracoronary fibrinolytic therapy with alteplase infused early after coronary reperfusion will reduce <P 0> microvascular obstruction </>. Design, Setting, and Participants: Between March 17, 2016, and December 21, 2017, 440 patients presenting at 11 hospitals in the United Kingdom within 6 hours of STEMI due to a proximal-mid-vessel occlusion of a major coronary artery were randomized in a 1:1:1 dose-ranging trial design. Patient follow-up to 3 months was completed on April 12, 2018. Interventions: Participants were randomly assigned to treatment with placebo (n = 151), alteplase 10 mg (n = 144), or alteplase 20 mg (n = 145) by manual infusion over 5 to 10 minutes. The intervention was scheduled to occur early during the primary PCI procedure, after reperfusion of the infarct-related coronary artery and before stent implant. Main Outcomes and Measures: The primary outcome was the amount of <P 0> microvascular obstruction </> (% <P 0> left ventricular mass </>) demonstrated by contrast-enhanced cardiac magnetic resonance imaging (MRI) conducted from days 2 through 7 after enrollment. The primary comparison was the alteplase 20-mg group vs the placebo group; if not significant, the alteplase 10-mg group vs the placebo group was considered a secondary analysis. Results: Recruitment stopped on December 21, 2017, because conditional power for the primary outcome based on a prespecified analysis of the first 267 randomized participants was less than 30% in both treatment groups (futility criterion). Among the 440 patients randomized (mean age, 60.5 years; 15% women), the primary end point was achieved in 396 patients (90%), 17 (3.9%) withdrew, and all others were followed up to 3 months. In the primary analysis, the mean <P 0> microvascular obstruction </> did not differ between the 20-mg alteplase and placebo groups (3.5% vs 2.3%; estimated difference, 1.16%; 95% CI, -0.08% to 2.41%; P = .32) nor in the analysis of 10-mg alteplase vs placebo groups (2.6% vs 2.3%; estimated difference, 0.29%; 95% CI, -0.76% to 1.35%; P = .74). <P 0, 1> Major adverse cardiac events </> (<P 1> cardiac death </>, <P 0> nonfatal MI </>, <P 35> unplanned hospitalization for heart failure </>) occurred in 15 patients (10.1%) in the placebo group, 18 (12.9%) in the 10-mg alteplase group, and 12 (8.2%) in the 20-mg alteplase group. Conclusions and Relevance: Among patients with acute STEMI presenting within 6 hours of symptoms, adjunctive low-dose intracoronary alteplase given during the primary percutaneous intervention did not reduce <P 0> microvascular obstruction </>. The study findings do not support this treatment. Trial Registration: ClinicalTrials.gov Identifier: NCT02257294.

30621276\_PD.txt

Title: Intraduodenal Administration of L-Valine Has No Effect on <P 0> Antropyloroduodenal Pressures </>, Plasma <P 0> Cholecystokinin </> Concentrations or <P 25> Energy Intake </> in Healthy, Lean Men.

Publication Type: Randomized Controlled Trial

Journal-Name:Nutrients

Journal ID: 101521595

Publication date: 2019/01/03 00:00 [accepted]

Whey protein is rich in the branched-chain amino acids, L-leucine, L-isoleucine and L-valine. Thus, branched-chain amino acids may, at least in part, mediate the effects of whey to reduce energy intake and/or blood glucose. Notably, 10 g of either L-leucine or L-isoleucine, administered intragastrically before a mixed-nutrient drink, lowered postprandial blood glucose, and intraduodenal infusion of L-leucine (at a rate of 0.45 kcal/min, total: 9.9 g) lowered fasting blood glucose and reduced energy intake from a subsequent meal. Whether L-valine affects energy intake, and the gastrointestinal functions involved in the regulation of energy intake, as well as blood glucose, in humans, is currently unknown. We investigated the effects of intraduodenally administered L-valine on <P 0> antropyloroduodenal pressures </>, plasma <P 0> cholecystokinin </>, <P 0> blood glucose </> and <P 25> energy intake </>. Twelve healthy lean men (age: 29 +/- 2 years, BMI: 22.5 +/- 0.7 kg/m(2)) were studied on 3 separate occasions in randomised, double-blind order. <P 0> Antropyloroduodenal pressures </>, plasma <P 0> cholecystokinin </>, <P 0> blood glucose </>, <P 0> appetite perceptions </> and <P 0> gastrointestinal symptoms </> were measured during 90-min intraduodenal infusions of L-valine at 0.15 kcal/min (total: 3.3 g) or 0.45 kcal/min (total: 9.9 g), or 0.9% saline (control). <P 25> Energy intake </> from a buffet-meal immediately after the infusions was quantified. L-valine did not affect <P 0>(E1) antral, <P 0> pyloric {(mean number; control: 14 +/- 5; L-Val-0.15: 21 +/- 9; L-Val-0.45: 11 +/- 4)} or <P 0> duodenal pressures </>, plasma <P 0> cholecystokinin </> (mean concentration, pmol/L; control: 3.1 +/- 0.3; L-Val-0.15: 3.2 +/- 0.3; L-Val-0.45: 3.0 +/- 0.3), <P 0> blood glucose </>, <P 0> appetite perceptions </>, <P 0> symptoms </> or <P 25> energy intake </> (kcal; control: 1040 +/- 73; L-Val-0.15: 1040 +/- 81; L-Val-0.45: 1056 +/- 100), at either load (p > 0.05 for all). In conclusion, intraduodenal infusion of L-valine, at loads that are moderately (3.3 g) or substantially (9.9 g) above World Health Organization valine requirement recommendations, does not appear to have <P 25> energy intake </> - or <P 0> blood glucose </> -lowering effects.

30621298\_PD.txt

Title: Multivitamin and Mineral Supplementation Containing Phytonutrients Scavenges Reactive Oxygen Species in Healthy Subjects: A Randomized, Double-Blinded, Placebo-Controlled Trial.

Publication Type: Randomized Controlled Trial

Journal-Name:Nutrients

Journal ID: 101521595

Publication date: 2018/12/29 00:00 [accepted]

Phytonutrients and vitamin and mineral supplementation have been reported to provide increased antioxidant capacity in humans; however, there is still controversy. In the current clinical trial, we examined the <P 0> antioxidant </> and <P 0> DNA protection </> capacity of a plant-based, multi-vitamin/mineral, and phytonutrient (PMP) supplementation in healthy adults who were habitually low in the consumption of fruits and vegetables. This study was an eight-week, double-blind, randomized, parallel-arm, and placebo-controlled trial. PMP supplementation for eight weeks reduced <P 0> reactive oxygen species (ROS) </> and prevented <P 0> DNA damage </> without altering endogenous antioxidant system. Plasma <P 0> vitamins </> and <P 0> phytonutrients </> were significantly correlated with ROS scavenging and DNA damage. In addition, gene expression analysis in PBMC showed subtle changes in <P 0> superoxide metabolic </> processes. In this study, we showed that supplementation with a PMP significantly improved <P 0> reactive oxygen species (ROS) </> scavenging activity and prevented <P 0> DNA damage </>. However, additional research is still needed to further identify mechanisms of actions and the role of circulating phytonutrient metabolites.

30621613\_PD.txt

Title: Does all single infarction have lower risk of <P 0> stroke </> recurrence than multiple infarctions in minor stroke?

Publication Type: Randomized Controlled Trial

Journal-Name:BMC neurology

Journal ID: 100968555

Publication date: 2019/01/10 06:00 [entrez]

BACKGROUND: Single acute infarction (SAI) usually had lower risk of stroke recurrence than multiple acute infarctions (MAIs) in minor stroke. To evaluate whether all SAI had lower risk of <P 0> stroke </> recurrence than MAIs in minor stroke. METHODS: We derived data from the imaging subgroup of the Clopidogrel in High-risk Patients with Acute Nondisabling Cerebrovascular Events (CHANCE) trial. Minor stroke were categorized into SAI and MAIs by infarction numbers in diffusion weighted imaging. SAI were classified as lacunar infarction and non-lacunar infarction. The outcome was <P 0> stroke </> recurrence within one-year follow-up. We assessed the associations between infarction patterns and <P 0> stroke </> recurrence using multivariable Cox regression models. RESULTS: Overall, 834 patients with minor stroke were included in this subgroup, 553 SAI (381 lacunar infarction, 172 non-lacunar infarction) and 281 MAIs. The rate of <P 0> stroke </> recurrence was 7.6%, 15.1% and 15.3% in lacunar infarction of SAI, non-lacunar infarction of SAI and MAIs at one year, respectively. Compared with MAIs, lacunar infarction of SAI had lower risk of <P 0> stroke </> recurrence (hazard ratio [HR] 0.41, 95% confidence interval [CI] 0.21-0.80, P = 0.009), but not in non-lacunar infarction of SAI (HR 1.01, 95% CI 0.60-1.69, P = 0.98). CONCLUSIONS: Lacunar infarction of SAI have lower risk of <P 0> stroke </> recurrence than MAIs, while non-lacunar infarction of SAI might have similar risk as MAIs. Except for the number of infarctions, size and location should also be considered to stratify risk of stroke recurrence in minor stroke. TRIAL REGISTRATION: http://www.clinicaltrials.gov Unique identifier: NCT00979589 . Date of registration: September 2009.