30813212\_PD.txt

Title: A high-fidelity simulator for needle cricothyroidotomy training is not associated with increased <P 32> proficiency </> compared with conventional simulators: A randomized controlled study.

Publication Type: Randomized Controlled Trial

Journal-Name:Medicine

Journal ID: 2985248R

Publication date: 2019/03/07 06:00 [medline]

BACKGROUND: A high-fidelity task simulator for cricothyroidotomy was created using data from a 3-dimensional (3D) computed tomography scan using a 3D printer. We hypothesized that this high-fidelity cricothyroidotomy simulator results in increased <P 32> proficiency </> for needle cricothyroidotomy compared with conventional simulators. METHODS: Cricothyroidotomy-naive residents were recruited and randomly assigned to 2 groups, including simulation training with a conventional simulator (Group C) and with a high-fidelity simulator (Group 3D). After simulation training, participants performed cricothyroidotomy using an ex vivo porcine larynx fitted with an endoscope to record the procedure. The primary outcomes were <P 32> success </> rate and <P 32> procedure time </>. The secondary outcome was a subjective measure of the similarity of the simulator to the porcine larynx. RESULTS: Fifty-two residents participated in the study (Group C: n = 27, Group 3D: n = 25). There was no significant difference in the <P 32> success </> rate or <P 32> procedure time </> between the 2 groups (success rate: P = .24, procedure time: P = .34). There was no significant difference in the similarity of the simulators to the porcine larynx (P = .81). CONCLUSION: We developed a high-fidelity simulator for cricothyroidotomy from 3D computed tomography data using a 3D printer. This anatomically high-fidelity simulator did not have any advantages compared with conventional dry simulators.

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Title: A prospective randomized open-label study of single injection versus continuous adductor canal block for postoperative analgesia after total knee arthroplasty.

Publication Type: Journal Article

Journal-Name:The bone & joint journal

Journal ID: 101599229

Publication date: 2019/03/02 06:00 [medline]

AIMS: Adductor canal block (ACB) has emerged as an alternative to femoral nerve block (FNB) for analgesia after total knee arthroplasty (TKA). The optimal duration of maintenance of the ACB is still questionable. The purpose of this study was to compare the <P 36> analgesic </> benefits and <P 0> physiotherapy (PT) </> outcomes of single-shot ACB to two different regimens of infusion of the continuous ACB, 24-hour and 48-hour infusion. PATIENTS AND METHODS: This was a prospective, randomized, unblinded study. A total of 159 American Society of Anesthesiologists (ASA) physical status I to III patients scheduled for primary TKA were randomized to one of three study groups. Three patients did not complete the study, leaving 156 patients for final analysis. Group A (n = 53) was the single-shot group (16 female patients and 37 male patients with a mean age of 63.9 years (sd 9.6)), group B (n = 51) was the 24-hour infusion group (22 female patients and 29 male patients with a mean age of 66.5 years (sd 8.5)), and group C (n = 52) was the 48-hour infusion group (18 female patients and 34 male patients with a mean age of 62.2 years (sd 8.7)). <P 0> Pain </> scores, <P 36> opioid requirements </>, PT test results, and patient-reported outcome instruments were compared between the three groups. RESULTS: The proportion of patients reporting severe <P 0> pain </>, defined as a pain score of between 7 and 10, on postoperative day number 2 (POD 2) were 21% for the single-shot group, 14% for the 24-hour block group, and 12% for the 48-hour block group (p = 0.05). Cumulative <P 36> opioid requirements </> after 48 hours were similar between the groups. <P 25> Functional </> outcomes were similar in all three groups in POD 1 and POD 2. CONCLUSION: There was no clear benefit of the 24-hour or 48-hour infusions over the single-shot ACB for the primary endpoint of the study. Otherwise, there were marginal benefits for keeping the indwelling catheter for 48 hours in terms of reducing the number of patients with moderate <P 0> pain </> and improving the <P 0> quality of pain management </>. However, all three groups had similar <P 36> opioid usage </>, <P 35> length of hospital stay </>, and <P 25> functional </> outcomes. Further studies with larger sample sizes are needed to confirm these findings. Cite this article: Bone Joint J 2019;101-B:340-347

30816665\_PD.txt

Title: The Mitochondria-Targeted Metabolic Tubular Injury in Diabetic Kidney Disease.

Publication Type: Randomized Controlled Trial

Journal-Name:Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology

Journal ID: 9113221

Publication date: 2019/03/01 06:00 [entrez]

BACKGROUND/AIMS: Diabetic kidney disease (DKD) is a leading cause of end-stage renal disease (ESRD) worldwide, and the importance of tubular injury has been highlighted in recent years. However, the underlying mechanisms and effective therapeutic targets are still unclear. In this study, we investigated <P 0> mtDNA </>, <P 0>(S1) mitochondrial dynamics <P 0>, function </> and metabolic pathways to determine if mitochondrial damage plays a critical role in the development of tubular injury in DKD patients. METHODS: A cross-sectional study was carried out among healthy controls (HCs, n = 65), diabetes patients without kidney disease (DCs, n = 48) and DKD patients (n = 60). Serum, peripheral blood mononuclear cells (PBMCs) and kidney biopsy specimens were obtained from participants. Metabolomics was employed to investigate <P 0> cellular metabolism </>. RESULTS: DKD patients had decreased <P 0> mtDNA copy </> numbers and increased <P 0> mtDNA damage </> compared to DCs. <P 0> Mitochondrial fragmentation </> was specifically presented in tubules, but not in podocytes of DKD patients. The accumulation of <P 0> damaged mtDNA </> and <P 0> fragmented mitochondria </> resulted in increased <P 0> reactive oxygen species (ROS) </> generation, activation of <P 0> apoptosis </> and loss of <P 0> mitochondrial membrane potential (DeltaPsim) </> in tubules and PBMCs. Furthermore, <P 0> glycolysis </> and <P 0> tricarboxylic acid (TCA) cycle </> was perturbed, and increased <P 0> dihydroxyacetone phosphate (DHAP) </> and decreased <P 0> succinyl-CoA synthetase (SCS) </> respectively in these two metabolic pathways were identified as potential biomarkers for tubular injury in DKD. CONCLUSION: Our study indicates that <P 0> mitochondrial damage </> could be the hallmark of tubular injury in DKD patients, and this would provide a novel and attractive therapeutic target to improve this disease.

*30816670\_PD.txt*

*Title: The Effects of Adiponectin and Adiponectin Receptor 1 Levels on Macrovascular Complications Among Patients with Type 2 Diabetes Mellitus.*

*Publication Type: Journal Article*

*Journal-Name:Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology*

*Journal ID: 9113221*

*Publication date: 2019/03/01 06:00 [entrez]*

*BACKGROUND/AIMS: The present study aimed to investigate the serum levels of adiponectin (APN) and adiponectin receptor 1 (AdipoR1) in patients with type 2 diabetes mellitus (T2DM) combined with macrovascular complications (MVC), as well as their correlation with clinical parameters. METHODS: A total of 60 T2DM patients were divided into 2 groups according to the presence of MVC: T2DM + MVC group (n=30) and T2DM group (n=30). Additionally, 30 healthy people were selected as control group (NC group). Clinical data and biological parameters were detected and recorded. T test was performed to compare the differences between two groups, and the results were corrected using Bonferroni method. Meanwhile, the correlation analysis and multiple stepwise regression analysis were used to analyze the association of APN and AdipoR1 with clinical factors. RESULTS: The levels of APN and AdipoR1 were significantly decreased in T2DM group and T2DM + MVC group compared with NC group, with the lowest value in T2DM + MVC group (all P<0.01). Serum APN levels were positively correlated with FINS and TG (r = 0.412, 0.316, respectively; both P<0.05), and negatively correlated with SBP, DBP and LDL-C (r = -0.292, -0.383, -0.334, respectively; all P<0.05). Serum levels of AdipoR1 were positively correlated with APN (r = 0.726, P<0.01), and negatively correlated with BMI, SBP, DBP, FBG, TC and LDL-C (r = -0.440, -0.446, -0.374, -0.444, -0.344, -0.709, respectively; all P<0.01). CONCLUSION: Serum levels of APN and AdipoR1 are significantly lower in T2DM group and T2DM + MVC group, showing lowest value in T2DM + MVC group. APN and AdipoR1 levels may influence glucose and lipid metabolism in T2DM patients.*

30817567\_PD.txt

Title: Partial thickness cornea tissue from small incision lenticule extraction: A novel patch graft in glaucoma drainage implant surgery.

Publication Type: Randomized Controlled Trial

Journal-Name:Medicine

Journal ID: 2985248R

Publication date: 2019/03/07 06:00 [medline]

OBJECTIVE: The aim of the present study was to observe the <P 32> feasibility </> and effect of cornea slice acquired from femtosecond laser surgery, small incision lenticule extraction (SMILE) as patch graft for the prevention of <P 0> drainage tube exposure </> and to compare with the sclera. METHODS: The research is a prospective comparative randomized study. Patients who received Ahmed glaucoma valve implantation surgery from August 2015 to January 2017 at the Xiamen Eye Center were randomly divided into 2 groups. Group A (corneal group) included 131 cases (135 eyes), receiving the 3 layers of allogeneic cornea slices as graft. Group B (scleral group) included 124 cases (127 eyes), using the sclera as allograft. The <P 32> appearance </>, <P 0> graft </>, <P 0> conjunctiva melting </>, and <P 0> tube exposure </> were the primary observation points. RESULTS: After followed up for 6 to 20 months, a thinner <P 32> appearance </> was seen in 3 eyes (2.2%) in the corneal graft group and 7 eyes (5.5%) in the scleral group. <P 0> Conjunctiva melted </> and <P 0> drainage tube exposed </> in 0 eyes (0%) in the corneal graft group and 2 eyes (1.6%) in the scleral group. One eye needed <P 36> repair surgery </>. There was no statistical difference between the 2 groups (P > .05). After surgery, the <P 0> intraocular pressure </> was reduced significantly in both groups (P < .05). The white sclera slice could be seen under the conjunctiva, thereby affecting the <P 32> cosmetic appearance </>. CONCLUSION: The cornea slice acquired from SMILE surgery can effectively prevent <P 0> drainage tube exposure </>. Moreover, it is <P 32> easy to acquire </>, safe, and <P 34> cheaper </>, giving the patient a better <P 32> cosmetic appearance </>.

30817591\_PD.txt

Title: Intrathecal dexmedetomidine can decrease the 95% effective dose of bupivacaine in spinal anesthesia for cesarean section: A prospective, double-blinded, randomized study.

Publication Type: Randomized Controlled Trial

Journal-Name:Medicine

Journal ID: 2985248R

Publication date: 2019/03/08 06:00 [medline]

BACKGROUND: Dexmedetomidine (Dex), as an adjuvant, has been reported to prolong the duration of spinal analgesia when adding to local anesthetic. We hypothesized that Dex could enhance the efficiency of intrathecal bupivacaine for spinal anesthesia in cesarean section. The aim of his study is to test our hypothesis that 5 mug Dex could enhance the efficiency of intrathecal bupivacaine and reduce the <P 32> dose </> requirement of spinal bupivacaine for patients undergoing cesarean section. METHODS: Ninety patients with ASA I or II, who underwent cesarean section, were randomized into 2 groups: group D (bupivacaine + 5 mug Dex) and group C (bupivacaine + the same volume of saline). The subsequent dose of spinal bupivacaine was determined by the improved up-down allocation method. The initial dose of bupivacaine in the 2 groups was 4 mg, and the subsequent dose for the following patient was depended on the probability of the current dose. ED95 of spinal bupivacaine was calculated using logistic regression model. RESULTS: The ED95 and 95% confidence intervals (95% CI) of spinal hyperbaric bupivacaine in group D and group C were 7.4 mg (95% CI, 5.6-12.4 mg) and 11.0 mg (95% CI, 4.4-56.8 mg), respectively. The <P 32> duration of sensory block </> was 120.5 +/- 37.0 minutes in Dex group and 70.5 +/- 34.5 minutes in Control group, respectively (P < .05). The <P 32> duration of analgesia </> was 230.5 +/- 40.5 minutes in Dex group and 145.1 +/- 28.5 minutes in Control group, respectively (P < .001). The <P 36> consumption </> of postoperative rescued sufentanil was significantly lower in Dex group than in the Control group (56.3 +/- 9.4 vs 65.9 +/- 10.7 mug). There was not significantly different in the patient <P 32> satisfaction </> of analgesia, incidence of <P 38> side effects </>, <P 0> neonatal </> outcomes and <P 0> neurological deficit </> between the 2 groups. CONCLUSION: Intrathecal 5 mug Dex enhances the efficacy of spinal bupivacaine by 24% in patients undergoing cesarean section with spinal anesthesia. No additional <P 38> side effect </> was observed by adding spinal Dex.

30817597\_PD.txt

Title: Effectiveness of Bazhengsan formula as an adjunctive therapy to ceftriaxone for female patients with uncomplicated gonorrhea: A pilot study.

Publication Type: Randomized Controlled Trial

Journal-Name:Medicine

Journal ID: 2985248R

Publication date: 2019/03/08 06:00 [medline]

BACKGROUND: This pilot study aimed to investigate the feasible effectiveness and safety of Bazhengsan formula (BZSF) as an adjunctive therapy to ceftriaxone for female patients with uncomplicated gonorrhea. METHODS: This pilot randomized controlled trial compared BZSF as an adjunctive therapy to ceftriaxone with ceftriaxone alone for Chinese female patients with uncomplicated gonorrhea. A total of 40 eligible patients were randomly allocated to a treatment group (received BZSF and ceftriaxone) or a control group (received ceftriaxone alone). All patients in both groups were treated for a total of 10 days. The primary outcome included <P 0> bacteriological cure </>. It was assessed by the eradication of urogenital gonorrhea at any site cultured after taken the study medications. The secondary outcome was <P 0> clinical response </>. For the safety assessment, <P 38> adverse events </> were recorded during the study period. RESULTS: After treatment, patients in both groups achieved promising effectiveness. However, no significant differences in <P 0> bacteriological cure </> (P = .34), <P 0> clinical response </> (P = .11), and safety were found between 2 groups. CONCLUSION: The findings of this study showed that BZSF as an adjunctive therapy to ceftriaxone may be not superior to the ceftriaxone alone for Chinese female patients with uncomplicated gonorrhea after 10 days treatment.

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Title: Rectus Sheath Block (RSB) Analgesia Could Enhance Significantly the Patient <P 32> Satisfaction </> Following Midline Laparotomy in Benign Disease and in Cancer: A Prospective Study With Special Reference to Nitrosative Stress Marker <P 0> Nitrotyrosine (NT) </> Plasma Concentrations.

Publication Type: Randomized Controlled Trial

Journal-Name:Anticancer research

Journal ID: 8102988

Publication date: 2019/02/19 00:00 [accepted]

BACKGROUND/AIM: Our hypothesis was that rectus sheath block (RSB) analgesia could enhance <P 32> satisfaction </> following midline laparotomy in patients with benign disease and cancer patients. PATIENTS AND METHODS: Initially, 56 patients were randomized into four groups; control group (n=12), single-dose (n=16), repeated-dose (n=12) and continuous infusion (n=16) RSB analgesia groups. The plasma concentrations of the NT marker were measured just before, immediately after and 24 h after operation. Patient <P 32> satisfaction </> at 24 h postoperatively was filed on a 11-point numeric rating scale (SFS24; 0=fully unsatisfied; 10=fully satisfied). RESULTS: The RSB analgesia significantly enhanced the SFS24 scores in the study groups (p=0.001). The median plasma <P 0> Nitrotyrosine (NT) </> concentrations (pg/ml) following surgery (POP1) were significantly lower in patients with cancer versus patients with benign disease (5.3 vs. 7.6, p=0.008). Jitter plots of the individual SFS24 values versus plasma NT concentrations were significantly correlated in benign and cancer patients (r=-0.284, p=0.028). CONCLUSION: The RSB analgesia could significantly enhance patient <P 32> satisfaction </> following midline laparotomy. Plasma <P 0> Nitrotyrosine (NT) </> concentrations versus patient satisfaction following surgery are significantly correlated in benign disease and cancer.

30842175\_PD.txt

Title: Prognostic Factors in Early-stage NSCLC: Analysis of the Placebo Group in the MAGRIT Study.

Publication Type: Journal Article

Journal-Name:Anticancer research

Journal ID: 8102988

Publication date: 2019/02/18 00:00 [accepted]

BACKGROUND/AIM: The analysis of prognostic factors is important to identify determinants of disease-free survival (DFS) and overall survival (OS) in resected non-small-cell lung cancer (NSCLC). PATIENTS AND METHODS: We examined baseline characteristics associated with <P 0, 1> disease-free survival (DFS) </> and <P 1> overall survival (OS) </> among 757 patients with resected, histologically proven, MAGE-A3-positive Stage IB-IIIA NSCLC assigned to placebo in the MAGRIT study (NCT00480025). We explored characteristics of NSCLC that could predict <P 0, 1> disease-free survival (DFS) </> and <P 1> overall survival (OS) </> using Cox regression models. RESULTS: The multivariate analysis showed that lower nodal stage, the presence of squamous cell carcinoma (SCC), a broader surgical resection in patients with SCC, and being female with non-SCC were significantly associated with longer <P 0, 1> disease-free survival (DFS) </>. Lower nodal stage and smaller tumor size were significantly associated with an improved <P 1> overall survival (OS) </>. Compared to Other International, enrollment in East Asia was associated with an improved <P 1> overall survival (OS) </> in patients with non-SCC. CONCLUSION: This is the first prognostic factor analysis in NSCLC performed on data from a large prospective study. These results confirm retrospective studies and add that histopathology subtype is a strong determinant of <P 0, 1> disease-free survival (DFS) </> in resected MAGE-A3-positive NSCLC.

*30842881\_PD.txt*

*Title: Piloting a participatory, community-based health information system for strengthening community-based health services: findings of a cluster-randomized controlled trial in the slums of Freetown, Sierra Leone.*

*Publication Type: Randomized Controlled Trial*

*Journal-Name:Journal of global health*

*Journal ID: 101578780*

*Publication date: 2019/03/09 06:00 [medline]*

*Background: Although community engagement has been promoted as a strategy for health systems strengthening, there is need for more evidence for effectiveness of this approach. We describe an operations research (OR) Study and assessment of one form of community engagement, the development and implementation of a participatory community-based health information system (PCBHIS), in slum communities in Freetown, Sierra Leone. Methods: A child survival project was implemented in 10 slum communities, which were then randomly allocated to intervention (PCBHIS) and comparison areas. In the 5 PCBHIS communities, the findings from monthly reports submitted by community health workers (CHWs) and verbal autopsy findings for deaths of children who died before reaching 5 years of age, were processed and shared at bimonthly meetings in each community. These meetings, called Community Health Data Review (CHDR) meetings, were attended by community leaders, including members of the Ward Development Committee (WDC) and Health Management Committee (HMC), by the CHW Peer Supervisors, and by representatives of the Peripheral Health Unit. Following a review of the information, attendees proposed actions to strengthen community-based health services in their community. These meetings were held over a period of 20 months from July 2015 to March 2017. At baseline and endline, knowledge, practice and coverage (KPC) surveys measured household health-related behaviors and care-seeking behaviors. The capacity of HMCs and WDCs to engage with the local health system was also measured at baseline and endline. Reports of CHW household contact and assessments of CHW quality were obtained in the endline KPC household survey, and household contacts measured in monthly submitted reports were also tabulated. Results: The self-assessment scores of WDCs' capacity to fulfil their roles improved more in the intervention than in the comparison area for all six components, but for only 1 of the 6 was the improvement statistically significant (monthly and quarterly meetings in which Peer Supervisor and/or CHW supervision was an agenda item). The scores for the HMCs improved less in the intervention area than in the comparison area for all six components, but none of these differences were statistically significant. Topics of discussion in CHDRs focused primarily on CHW functionality. All three indicators of CHW functioning (as measured by reports submitted from CHWs) improved more in the intervention area relative to the comparison area, with 2 out of 3 measures of improvement reaching statistical significance. Five of 7 household behaviors judged to be amenable to promotion by CHWs improved more in the intervention area than in the comparison area, and 2 out of the 5 were statistically significant (feeding colostrum and appropriate infant and young child feeding). Four of the 6 care-seeking behaviors judged to be amenable to promotion by CHWs improved more in the intervention area than in the comparison area, and 1 was statistically significant (treatment of diarrhea with ORS and zinc). None of the findings that favored the comparison area were statistically significant. Conclusions: This study was implemented in challenging circumstances. The OR Study intervention was delayed because of interruptions in finalizing the national CHW policy, two separate cholera epidemics, and the Ebola epidemic lasting more than 2 years. Weaknesses in the CHW intervention severely limited the extent to which the PCBHIS could be used to observe trends in mortality and morbidity. Nonetheless, the positive results achieved in the area of functionality of the CHW intervention and community structure capacity are encouraging. Results suggest there is value in further methodologically rigorous investigations into improving community-based health system functioning through a similar approach to community engagement.*