

《慢病防控和健康管理战略研究》参考

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[资讯]

1. NHLBI announces new director of the Jackson Heart Study

【NIH】 The National Heart, Lung, and Blood Institute (NHLBI), part of the National Institutes of Health, has announced April P. Carson, Ph.D., as the new director of the Jackson Heart Study (JHS). The JHS is the nation's largest and longest-running longitudinal study of cardiovascular health in African Americans, involving more than 5,300 participants in Jackson, Mississippi since it began in 1998.

链接: <https://www.nhlbi.nih.gov/news/2021/nhlbi-announces-new-director-jackson-heart-study>

[文献速递]

2. Clinical efficacy of antiviral therapy in patients with hepatitis B-related cirrhosis after transjugular intrahepatic portosystemic shunt

文献来源: *世界胃肠病学杂志: 英文版*

作者: *Xin Yao*

摘要: BACKGROUND As a country with a high burden of hepatitis B, China has about 86 million cases of hepatitis B virus infection, ranking the first in the world. Currently, there are about 390,000 deaths due to hepatitis B-related complications such as liver cirrhosis

and liver cancer every year. Consequently, how to control portal hypertension, improve liver functional reserve, and reduce the incidence of hepatic failure and liver cancer in such patients is the focus of current clinical attention. Previous clinical study in our center suggested that at 24 mo after transjugular intrahepatic portosystemic shunt (TIPS), the liver functional reserve of patients with hepatitis B cirrhosis was better than that of patients with alcohol-induced and immune cirrhosis, which may be related to the effective etiological treatment.

AIM To investigate the clinical efficacy of three first-line antiviral drugs recommended by the guidelines of prevention and treatment for chronic hepatitis B in China (2019) in the treatment of patients with hepatitis B-related cirrhosis who had received a TIPS.

METHODS The clinical data of 137 patients with hepatitis B-related cirrhosis with portal hypertension after receiving TIPS at our centre between March 2016 and December 2020 were analysed retrospectively. According to different anti-viral drugs, the patients were divided into entecavir (ETV) (n=70), tenofovir alafenamide fumarate (TAF) (n=32), and tenofovir disoproxil fumarate (TDF) (n=35) groups. The cumulative incidence of hepatic encephalopathy and hepatocellular carcinoma, survival, and changes in hepatic reserve function and glomerular filtration rate in patients treated with different antiviral drugs within 24 mo after surgery were investigated.

RESULTS At 24 mo after surgery, the Child-Pugh score in the TAF group (6.97 ± 0.86) was lower than that in the TDF (7.49 ± 0.82 ; $t = -2.52$, $P = 0.014$) and ETV groups (7.64 ± 1.17 ; $t = -2.92$, $P = 0.004$). The model for end-stage liver disease score in the TAF group at 24 mo after surgery was 9.72 ± 1.5 , which was lower than that in the TDF (10.74 ± 2.33 ; $t = -2.09$, $P = 0.040$) and ETV groups (10.97 ± 2.17 ; $t = -2.93$, $P = 0.004$). At 24 mo after surgery, the estimated glomerular filtration rate (eGFR) in the TAF group (104.41 ± 12.54) was higher than that in the TDF (93.54 ± 8.97) and ETV groups (89.96 ± 9.86) ($F = 21.57$, $P < 0.001$).

CONCLUSION At 24 mo after surgery, compared with TDF and ETV, TAF has significant advantages in the improvement of liver functional reserve and eGFR.

链接: http://pan.ckcest.cn/rcservice//doc?doc_id=85533

3. Short-Acting Sedative-Analgesic Drugs Protect Against Development of Ventilator-Associated Events in Children

文献来源: *Respiratory care*

作者: *Pena-Lopez, Yolanda*

摘要: BACKGROUND: The U.S. Centers for Disease Control and Prevention proposed a shift in its surveillance paradigm from ventilator-associated pneumonia to ventilator-associated events (VAE) to broaden the focus of prevention and achieve a greater impact on outcomes. The main objective of the present study was to identify factors associated with pediatric VAEs in children undergoing mechanical ventilation ≥ 48 h. METHODS: This was a secondary analysis of a pediatric cohort of a multicenter prospective study. Children who underwent mechanical ventilation ≥ 48 h were included. Exclusion criteria were previous ventilation, extracorporeal life support, and right-to-left shunt or pulmonary hypertension. In the subjects with multiple episodes of mechanical ventilation, only the first episode was considered. Remifentanyl and propofol are classified as short-acting sedative and analgesic agents. Pediatric VAE is defined as an "increase in PEEP ≥ 2 cm of H₂O, an increase in F-IO₂ of 0.20, or an increase in F-IO₂ of 0.15 plus an increase in PEEP ≥ 1 cm of H₂O sustained for ≥ 1 d. Associations with pediatric VAE were estimated through multivariate Cox proportional hazards analysis. Hazard ratios and 95% CI were computed. RESULTS: In a cohort of 90 children, 24 pediatric VAEs were documented in 906 ventilator-days. Pediatric VAEs developed after a median of 4.5 (interquartile range, 4-7.25) d. Surgical admissions, spontaneous breathing trials, early mobility, vasopressors, red blood cell units transfusion, type of sedation (continuous vs intermittent), benzodiazepine use for >3 d, and pharmacologic paralysis were not associated with pediatric VAE, whereas the use of continuous short-acting sedative-analgesic agents was identified as a strong protective factor against pediatric VAE (hazard ratio 0.06 [95% CI 0.007-0.5]). CONCLUSIONS: Treatment with short-acting sedative-analgesic agents should be preferred for sedation of mechanically ventilated children in intensive care.

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4. Pharmacist-Directed Self-Management of Blood Pressure Versus Conventional Management in Patients with Hypertension

文献来源: *High blood pressure & cardiovascular prevention*

作者: *Khiali, Sajad*

摘要: Introduction Data has shown that pharmacist-directed health services play a key role in the treatment of hypertension. Aim We aimed to perform this study to compare two methods of the pharmacist-directed home blood pressure monitoring (HBPM) and the usual care. Methods A total of 126 patients with uncontrolled blood pressure (BP) were randomized 1:1 into the pharmacist-directed HBPM and the usual care groups. In the intervention group, the patients were trained to measure their BPs and adjust their medications based on the designed protocol under the supervision of a clinical pharmacist. The primary endpoint of the study was the comparison of the BPs at baseline and months 1, 3, and 6. Results One month after the allocation, the baseline systolic BP (SBP) (150.5 +/- 13.1 vs. 149.7 +/- 11.2 mm Hg; P = 0.71) and diastolic BP (DBP) (97.2 +/- 9.8 vs. 93.6 +/- 14.5; P = 0.11) significantly dropped to the control range equally in 85.2% of the patients in two groups (SBP: 128.8 +/- 6.4 vs. 125.6 +/- 7.1 mm Hg; P = 0.01 and DBP: 89.1 +/- 6.2 vs. 81.5 +/- 6.0 mm Hg; P = 0.01). This pattern continued during the study period (month 6; SBP: 115.6 +/- 10.1 vs. 116.1 +/- 9.6 mm Hg; P = 0.78; DBP: 79.0 +/- 5.0 vs. 77.2 +/- 5.8 mm Hg; P = 0.08). Conclusions In this study, we did not observe any significant difference between the pharmacist-directed HBPM and usual care methods in decreasing BP.

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5. Therapeutic inertia in the management of dyslipidaemia and hypertension in incident type 2 diabetes and the resulting risk factor burden

文献来源: *Diabetes, obesity & metabolism*

作者: *Joanna Z.J. Ling*

摘要: Objective: To investigate trends in the prevalence of hypertension and dyslipidaemia in incident type 2 diabetes (T2DM), time to antihypertensive (AHT) and lipid-lowering therapy (LLT), and the association with systolic blood pressure (SBP) and lipid control. Research Design and Methods: Using The Health Improvement Network UK primary care database, 254 925 people with incident T2DM and existing dyslipidaemia or

hypertension were identified. Among those without atherosclerotic cardiovascular disease (ASCVD) history and not on AHT or LLT at diagnosis, the adjusted median months to initiating an AHT or an LLT, and the probabilities of high SBP or lipid levels over 2 years in people initiating therapy within or after 1 year were evaluated according to high and low ASCVD risk status. Results: At diabetes diagnosis, 66% and 66% had dyslipidaemia and hypertension, respectively. During 2005 to 2016, dyslipidaemia prevalence increased by 10% in people aged <60 years, while hypertension prevalence remained stable in all age groups. Among those with high ASCVD risk status in the age groups 18 to 39, 40 to 49, and 50 to 59 years, the median number of months to initiation of therapy were 20.4 (95% confidence interval [CI] 20.3-20.5), 10.9 (95% CI 10.8-11.0), and 9.5 (95% CI 9.4-9.6) in the dyslipidaemia subcohort, and 28.1 (95% CI 28.0-28.2), 19.2 (95% CI 19.1-19.3), and 19.9 (95% CI 19.8-20.0) in the hypertension subcohort. Among people with high and low ASCVD risk status, respectively, compared to early LLT initiators, those who initiated LLT after 1 year had a 65.3% to 85.3% and a 65.0% to 85.3% significantly higher probability of failing lipid control at 2 years of follow-up, while late AHT initiators had a 46.5% to 57.9% and a 40.0% to 58.7% significantly higher probability of failing SBP control. Conclusions: Significant delay in initiating cardioprotective therapies was observed, and time to first prescription was similar in the primary prevention setting, irrespective of ASCVD risk status across all T2DM diagnosis age groups, resulting in poor risk factor control at 2 years of follow-up.

链接: http://pan.ckcest.cn/rcservice//doc?doc_id=85538

6. A Practical Approach to Assist Asthmatics to Lose Weight

文献来源: *The journal of allergy and clinical immunology*

作者: *Kolinsky, Nicholas C.*

摘要: Treating patients with obesity, particularly asthmatics, is a complex challenge that requires a unique and individually tailored approach. Obesity, defined by the Centers for Disease Control and Prevention, is a body mass index of 30.0 kg/m² or greater. It affects approximately 43% of adults and 19% of youth in America. It is a multifactorial disease and should be managed with the same intensity as any other medical problem, for it

represents a risk factor for the onset and severity of asthma. Furthermore, it is a comorbid condition that exacerbates rhinosinusitis, gastroesophageal reflux disease, obstructive sleep apnea, hypertension, anxiety, and depression. Being obese also increases morbidity for cardio/cerebrovascular diseases, metabolic syndrome, type 2 diabetes, breast and bladder cancer, and migraines. Osteoarthritis, in particular, of the knees and hips, is also associated with obesity, and that too will complicate asthma by hindering a subject's mobility and ability to exercise. This paper reviews the epidemiology and pathophysiology of obesity, its effect on asthma, and practical strategies to achieve weight loss.

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7. Accelerating Use of Self-measured Blood Pressure Monitoring (SMBP) Through Clinical-Community Care Models

文献来源: *Journal of community health*

作者: *Meador, Margaret*

摘要: Self-measured blood pressure monitoring (SMBP), the regular measurement of blood pressure by a patient outside the clinical setting, plus additional support, is a proven, cost-effective but underutilized strategy to improve hypertension outcomes. To accelerate SMBP use, the Centers for Disease Control and Prevention (CDC) funded the National Association of Community Health Centers, the YMCA of the USA, and Association of State and Territorial Health Officials to develop cross-sector care models to offer SMBP to patients with hypertension. The project aimed to increase the use of SMBP through the coordinated action of health department leaders, community organizations and clinical providers. From 1/31/2017 to 6/30/2018, nine health centers in Kentucky, Missouri, and New York partnered with seven local Y associations (local Y) and their local health departments to design and implement care models that adapted existing primary care SMBP practices by leveraging capacities and resources in community and public health organizations. Nine collaborative care models emerged, shaped by available community assets, strategic priorities, and organizational culture. Overall, 1421 patients were recommended for SMBP; of those, 795 completed at least one cycle of SMBP (BP measurements morning and evening for at least three consecutive days). Of those

recommended for SMBP, 308 patients were referred to a local Y to receive additional SMBP and healthy lifestyle support. Community and public health organizations can be brought into the health care delivery process and can play valuable roles in supporting patients in SMBP.

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8. Displacement, work, and long-term health in communities on the Thailand-Burma border

文献来源: *American journal of human biology*

作者: *AN Suk.*

摘要: In western Thailand, many people living in villages on the border with Burma have experienced one or more events of forced displacement and migration. People of Karen and other non-Thai ethnicities often experience social and economic marginalization in Thailand as well as legal precarity. On the Thailand-Burma border, the psychosocial impacts of these layered displacements and continued marginalization on border residents are well-documented; however, the implications for chronic health conditions are less explored in this population. This presentation draws on semi-structured interviews (n=23) with non-Thai residents of two border districts and with Thai healthcare providers working in the border area to discuss community members' health priorities. While health initiatives in the border area often focus on the prevention and control of infectious diseases, these interviews indicate community members' increasing concern with chronic health conditions, in particular hypertension. This discussion therefore uses the interview data to examine structural factors that shape vulnerability to chronic ailments and constitute barriers to their effective management in the border context. Exploring these factors - which include changes in land use and diet, employment in agricultural wage labor, the experience of forced displacement, and non-Thai legal identity - highlights avenues for future research.

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9. Prevalence and Risk Factors of Hypertension Among Young Adults in Albania

文献来源: *High blood pressure & cardiovascular prevention*

作者: *Ahammed, Benojir*

摘要: Introduction Hypertension is one of the major risk factors for cardiovascular disease and the leading cause of death worldwide. Hypertension was defined as systolic or diastolic blood pressure according to Joint National Committee 7 (JNC7) and 2017 American College of Cardiology/American Hypertension Association (ACC/AHA) rules. Aim The aims of this study was to determine the difference in hypertension prevalence and its risk factors using ACC/AHA rule, and compared its result with JNC7 rule. Methods Data were collected using two-stage stratified cluster sample of households from 2017/18 Albanian Demographic and Health Survey. Data were analyzed using the descriptive and multivariate logistic regression model. Results Among 15,003 respondents aged 15-49 years, the overall prevalence of hypertension was 63.48% and 16.24%, as per ACC/AHA and JNC7 rules, respectively with an absolute increase of prevalence by 47.3% (CI 46.4-48.2%). According to the ACC/AHA rule, in most of the categories of the respondents, the prevalence of hypertension was 40% higher compared with the JNC7 rule. In multivariate analysis, age, education, richest respondents, number of living children (≥ 3), health insurance and gender had significant ($p < 0.05$) impact on hypertension for both rules. Besides, the middle and richer wealth index, religion, and physically active work had also significant ($p < 0.05$) impact on hypertension for JNC7 rules. Conclusions Newly established ACC/AHA rule led to a significant increase in the proportion of hypertension among the Albanian populations. Similarly, there was a significant difference in the impact of some socioeconomic factors on hypertension as per both rules. Implementation of the prevention and control programs of hypertension are required to increase the awareness of the bad impact of hypertension.

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10. Blood pressure-lowering efficacy of a 6-week multi-modal isometric exercise intervention

文献来源: *Blood Pressure Monitoring*

作者: *Baddeley-White, Daniel S.*

摘要: Isometric exercise training (IET) is an effective method for reducing resting blood pressure (BP). To date, no research studies have been conducted using multiple exercises within an IET intervention. Previous research has suggested that varied exercise programmes may have a positive effect on adherence. Therefore, this randomized controlled study aimed to investigate the BP-lowering efficacy of a multi-modal IET (MIET) intervention in healthy young adults. Twenty healthy participants were randomized to an MIET [n = 10; four women; SBP 117.9 +/- 6.9 mmHg; DBP 66.3 +/- 5.1 mmHg] or control (CON) group (n = 10; five women; SBP, 123.3 +/- 10.4 mmHg; DBP, 77.3 +/- 6.7 mmHg). The MIET group completed three sessions per week of 4, 2-min isometric contractions, with a 1-min rest between each contraction, for 6 weeks. Resting BP and heart rate (HR) were measured at baseline and post-intervention. Pre-to-post intervention within-group reductions in resting BP were observed (SBP: 5.3 +/- 6.1 mmHg, DBP: 3.4 +/- 3.7 mmHg, MAP: 4.0 +/- 3.9 mmHg, HR: 4.8 +/- 6 .6 bpm), although clinically relevant (≥ 2 mmHg), these changes were not statistically significant. Significant ($p < 0.05$) between-group differences were found between the intervention and control groups, indicating that the MIET intervention has a greater BP-lowering effect compared to control. The clinically relevant post-training reductions in resting BP suggest that MIET may be a promising additional IET method for hypertension prevention. These findings; however, must be interpreted with caution due to the small sample size and the non-clinical cohort.

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