

《整合医学战略研究（2035）》参考

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中国工程科技知识中心医药卫生专业分中心

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[动态信息]

1. Kick-Starting Japan's Healthcare Revolution

【Forbes】 If you suffer a stroke, can virtual reality help you learn to walk again? That's exactly what one Japanese startup is exploring, and early results are encouraging. The research is part of a wider trend in Japan to harness the latest technological innovations to advance medicine and healthcare. A life sciences networking nonprofit with hundreds of members from inside and outside Japan is at the center of this boom.

链接: <https://www.forbes.com/sites/japan/2019/07/01/kick-starting-japans-healthcare-revolution/#423546794e6f>

2. Neurotechnology Holds Promise for Chronic Stroke Patients

【NatureWorldNews】 Neurotechnology-based therapies, including brain-machine interfaces, robotics, and brain stimulation among others, will lead to the largest treatment effects and success if they are tailored to the needs of individual patients, and used in combination, say the authors from the Wyss Center for Bio and Neuroengineering, Swiss Federal Institute of Technology Lausanne (EPFL), Scuola Superiore Sant'Anna, University of Geneva Faculty of Medicine and Clinique Romande de Réadaptation. The paper calls for longitudinal clinical studies to show the rehabilitation benefits of individual therapies as well as the use of multiple

complementary therapies used in combination over long time periods.

链接: <https://www.natureworldnews.com/articles/41646/20190701/neurotechnology-holds-promise-for-chronic-stroke-patients.htm>

3. Rehab center in Turkey treats addicts without medicine

【AA】 Drug addicts are being treated and led back to normal life without using any medication, at a rehabilitation center in Turkey's northwestern Balikesir province.

链接: <https://www.aa.com.tr/en/health/rehab-center-in-turkey-treats-addicts-without-medicine/1515184>

4. Paramount Bed's latest nursing facility displayed at ISPRM 2019

【Business Standard】 The new rehabilitation devices of Paramount Bed, a pioneer of medical beds, was displayed during an exhibition in the International Society of Physical and Rehabilitation Medicine.

链接: https://www.business-standard.com/article/news-ani/paramount-bed-s-latest-nursing-facility-displayed-at-isprm-2019-119062400473_1.html

5. 'Unique' rehabilitation exercise trial seeks participants with MS

【CSP】 Karen Saunders, a consultant clinical and research neuro-physiotherapist, is the co-investigator on a feasibility trial that is evaluating the use of a balance exercise programme that makes use of a Rex robotic exoskeleton.

链接: <https://www.csp.org.uk/news/2019-06-17-unique-rehabilitation-exercise-trial-seeks-participants-ms>

6. UNM opens residency program for rehab doctors

【Albuquerque Journal】 The University of New Mexico's Division of Physical Medicine & Rehabilitation was established a few years ago to enhance recovery for patients who have received lifesaving stroke and trauma treatment at UNM Hospital.

链接: <https://www.abqjournal.com/1332641/unm-opens-residency-program-for-rehab-doctors.html>

7. Geisel study finds downside risk contracts still less common for ACOs

【EurekAlert】 Findings from a new study conducted by a team of researchers at Dartmouth's Geisel School of Medicine and published in the July issue of Health Affairs, shows that while the number and variety of contracts held by Accountable Care Organizations (ACOs) have increased dramatically in recent years, the proportion of those bearing downside risk has seen only modest growth.

链接: https://www.eurekalert.org/pub_releases/2019-07/tgso-gsf070119.php

8. Japanese Encephalitis: Health minister dispatches central team to review situation in Assam

【My Nation】 In view of the recent cases of Japanese Encephalitis (JE) in Assam, Union health minister Harsh Vardhan on Sunday (June 30) dispatched a Central team to review the situation in the state.

链接: <https://www.mynation.com/india-news/former-finance-minister-arun-jaitley-gst-may-become-two-tier-tax-ptylxs>

9. 深圳成立首家整合医学研究院

【新华网】 15日, 集整合医学基础研究、临床实践、教学培训、科技创新为一体的南方医科大学深圳医院整合医学研究院正式成立。这是深圳首家整合医学研究院。

链接: <http://baijiahao.baidu.com/s?id=1603414201090523606&wfr=spider&for=pc>

10. 樊代明院士: 创新研究中, 易忽略的思维

【药智网】“医学是多元的, 我们用单元去分析; 生命是非线性的, 我们用线性去分析; 病人是异质的, 我们用同质去分析; 病情是变化的, 我们用固化去分析, 可行吗? 一个事物有正面就有反面, 还有侧面, 全世界只研究一面, 其实真理在对面和侧面。这条路走不通要换一条路, 不要认为我们习以为常是对的。所以年轻人, 你要有出息吗? 我建议你们一定要走“绝路”。因为“绝路”是很少

人走的路，“绝路”绝不了，要靠你去开辟，因为天无绝人之路。”

链接：<https://baijiahao.baidu.com/s?id=1637291330639908047&wfr=spider&for=pc>

[文献速递]

1. Dynamics of Interactions between Cerebral Networks Derived from fMRI Data and Motor Rehabilitation during Stokes

作者：Savelov, A. A.

文献来源：*Bulletin of experimental biology and medicine*

摘要：The connections between large neuronal networks were analyzed in 12 patients with ischemic or hemorrhagic strokes and hemiparesis included in the course of the interactive brain stimulation in the area of the primary motor cortex by the analysis of independent components of fMRI. The results obtained in 3 patients are presented. Desynchronization of the visual networks with each other and with the motor networks as well as positive dynamics in Rankin scale and box and blocks test were observed in the patients. These data attest to a decrease in the importance of visual control during movements and probably on partial restoration of proprioception. The important role of interactive brain stimulation and network analysis of fMRI data in neurology are discussed.

链接：http://pan.ckcest.cn/rcservice//doc?doc_id=39598

2. Tele-Assisted Palliative Homecare for Advanced Chronic Obstructive Pulmonary Disease: A Feasibility Study

作者：Michele Vitacca

文献来源：*Journal of palliative medicine*

摘要：Background: Despite real needs, very few chronic obstructive pulmonary disease (COPD) patients with life-limiting disease receive a well-organized support for palliative care (PC). Objective: To test the feasibility of, and patient satisfaction with, an advanced care plan for severe COPD patients followed by tele-assistance at home for six months that focused on monitoring patient's palliative topics

through a dedicated checklist. Methods: Ten hospitalized patients with severe COPD (Results: The palliative talk was feasible and anxiety low during the talk. Nine out 10 patients were followed up by nurse till the end of the program. Overall bad days of life, negative emotions, and perception of disease deterioration were the palliative topics more frequently declared by patient during the phone calls. Two patients changed their preference from EI to O_(2) therapy/sedation as a consequence of the intervention. Five out of 10 patients died. All patients expressed a high level of satisfaction of the service. Discussion: Tele-assisted PC is feasible and well accepted. According to these observations, a suitable supportive program can be the goal of a future study.

链接: http://pan.ckcest.cn/rcservice//doc?doc_id=39605

3. Improving Outcomes in Oncological Colorectal Surgery by Prehabilitation

作者: Bruns, Emma R. J.

文献来源: *American Journal of Physical Medicine and Rehabilitation*

摘要: Introduction: The cornerstone in the treatment of colorectal cancer is surgery. A surgical event poses a significant risk of decreased functional decline and impaired health-related quality of life. Prehabilitation is defined as the multimodal preoperative enhancement of a patient's condition. It may serve as a strategy to improve postoperative outcomes. Prehabilitation requires a multidisciplinary effort of medical health care professionals and a behavioral change of the patient.

链接: http://pan.ckcest.cn/rcservice//doc?doc_id=39603

4. Does Therapy With Biofeedback Improve Swallowing in Adults With Dysphagia? A Systematic Review and Meta-Analysis

作者: Benfield, Jacqueline K.

文献来源: *Archives of Physical Medicine and Rehabilitation*

摘要: Objective: To describe and systematically review the current evidence on the effects of swallow therapy augmented by biofeedback in adults with dysphagia (PROSPERO 2016:CRD42016052942).

链接: http://pan.ckcest.cn/rcservice//doc?doc_id=39602

5. **Effects of comprehensive cardiac rehabilitation on functional capacity in a middle-income country: a randomised controlled trial**

作者: Gabriela Suellen da Silva Chaves

文献来源: *Heart*

摘要: Despite the growing epidemic of cardiovascular diseases in middle-income countries, there is insufficient evidence about cardiac rehabilitation (CR) in these countries. Thus, the effects of comprehensive CR on functional capacity and risk factors were investigated in Brazil, to test the hypothesis that it results in better outcomes than exercise-only or no CR. Single-blinded, randomised controlled trial with three parallel arms: comprehensive CR (exercise+education) versus exercise-only CR versus wait-list control. Eligible coronary patients were randomised in blocks of four with 1:1:1 concealed allocation. Participants randomised to exercise-only CR received 36 exercise classes; comprehensive CR group also received 24 educational sessions. The primary outcome was incremental shuttle walk test (ISWT) distance; secondary outcomes were cardiovascular risk factors. All outcomes were assessed at baseline and 6 months later. Analysis of covariance was performed on the basis of intention-to-treat (ITT) and per-protocol. 115 (88.5%) patients were randomised; 93 (80.9%) were retained. There were improvements in ISWT distance from pretest to post-test with comprehensive (from 358.4 ± 132.6 to 464.8 ± 121.6 m; mean change = 106.4; $p < 0.001$) and exercise-only (from 391.5 ± 118.8 to 488.1 ± 106.3 m; mean change = 96.5, $p < 0.001$) CR, with significantly greater functional capacity with comprehensive CR versus control (ITT: mean difference = 75.6 ± 30.7 m, 95% CI 1.4 to 150.2). There were also reductions in systolic blood pressure with comprehensive CR (ITT: reduction of 6.2 ± 17.8 mm Hg, $p = 0.04$). There were no significant differences for other outcomes. Results showed clinically significant improvements in functional capacity and blood pressure with CR, and significantly greater functional capacity with comprehensive CR compared with usual care. NCT02575976; Results.

链接: http://pan.ckcest.cn/rcservice//doc?doc_id=39601

6. The effect of sensory-targeted ankle rehabilitation strategies on single-leg center of pressure elements in those with chronic ankle instability: A randomized clinical trial

作者: McKeon, Patrick O.

文献来源: *Journal of science and medicine in sport*

摘要: Objectives: To determine the effects of sensory-targeted ankle rehabilitation strategies on laboratory oriented measures of single-leg balance in those with chronic ankle instability.

链接: http://pan.ckcest.cn/rcservice//doc?doc_id=41014

7. Current perspectives of Australian therapists on rehabilitation and return to sport after anterior cruciate ligament reconstruction: A survey

作者: Ebert, Jay R.

文献来源: *Physical therapy in sport*

摘要: Objectives: To investigate views and practices of Australian therapists on rehabilitation and return to sport (RTS) after anterior cruciate ligament reconstruction (ACLR).

链接: http://pan.ckcest.cn/rcservice//doc?doc_id=41012

8. Is recovery from ankle sprains negatively affected by obesity?

作者: Bielska, I. A.

文献来源: *Annals of physical and rehabilitation medicine*

摘要: Objective: Ankle sprains are common injuries that may lead to long-term morbidity. Individuals with obesity are at increased risk for ankle sprains; however, prognostic associations between body mass index (BMI) and recovery are less well understood. This study investigated whether BMI status affects recovery from ankle sprains.

链接: http://pan.ckcest.cn/rcservice//doc?doc_id=41013

9. Virtual reality for spinal cord injury-associated neuropathic pain: Systematic review

作者: Chi, B.

文献来源: *Annals of physical and rehabilitation medicine*

摘要: Background: Treatment of spinal cord injury (SCI)-associated neuropathic pain is challenging, with limited efficacy and no definitive options, and SCI patients often show resistance to pharmacologic treatment. Virtual reality (VR) therapy is a non-invasive, non-pharmacologic alternative with minimal adverse effects.

链接: http://pan.ckcest.cn/rcservice//doc?doc_id=41016

10. The Prevalence and Prognosis of Sarcopenic Dysphagia in Patients Who Require Dysphagia Rehabilitation

作者: Wakabayashi, H.

文献来源: *The journal of nutrition, health & aging*

摘要: ObjectivesThe purpose of this study was to assess the prevalence and prognosis of sarcopenic dysphagia in patients who require dysphagia rehabilitation.DesignProspective cohort study.SettingTertiary-care acute general hospital.ParticipantsOne hundred and eight patients referred to the Department of Rehabilitation Medicine for dysphagia rehabilitation.MeasurementsThe Food Intake Level Scale (FILS), a 5-step diagnostic algorithm for sarcopenic dysphagia.ResultsThe study included 72 males and 36 females (mean age, 76.7 years). Comorbid diseases included brain and nervous system disease (36%), cardiovascular disease (25%), respiratory disease (14%), and cancer (11%). Median energy intake was 1159 kcal (interquartile range: 648, 1502). Median FILS at admission and discharge was 4 (interquartile range: 2, 7) and 8 (interquartile range: 5, 8), respectively. Sarcopenic dysphagia was observed in 35 patients (32%). Sarcopenic dysphagia was associated with lower FILS at referral and discharge,

lower calf circumference, lower handgrip strength, lower body mass index, lower serum albumin, and higher C-reactive protein at referral. Tongue pressure, energy intake, and Barthel index did not differ significantly between patients with or without sarcopenic dysphagia. Ordered logistic regression analysis of the FILS at discharge adjusted for presence of sarcopenic dysphagia, age, sex, and the FILS at admission revealed that presence of sarcopenic dysphagia ($=-1.603$, 95% confidence intervals $= -2.609, -0.597$, $p=0.002$), sex, and the FILS at admission were independently associated with the FILS at discharge. Conclusions The prevalence of sarcopenic dysphagia in patients who require dysphagia rehabilitation was quite high. Sarcopenic dysphagia was independently associated with poor swallowing function at discharge.

链接: http://pan.ckcest.cn/rcservice//doc?doc_id=41015

[研究报告]

1. **A Systematic Literature Review of the Use and Effectiveness of the Computer Assisted Rehabilitation Environment for Research and Rehabilitation as it Relates to the Wounded Warrior.**

发布源: *Naval Health Research Center, San Diego, CA.*

发布时间: 2015 年

摘要: Several U.S. military treatment and research facilities employ a Computer Assisted Rehabilitation Environment (CAREN) [Motek Medical BV, Amsterdam, The Netherlands] for research and rehabilitation of complex injuries exhibited by Wounded Warriors. There has been little scientific evidence of the effectiveness of this type of system for rehabilitation. A systematic review of the literature was completed to determine what type of work has been performed on the CAREN and report findings of clinical significance. Specific terms were searched on electronic databases to include journal articles abstracts, and peer-reviewed conference proceedings related to the CAREN. Twenty-six publications were elicited that met our criteria. These were divided by their primary focus: rehabilitation, clinical

research, and technical reports. Results from published articles have determined that the system is a capable tool for both assessment and rehabilitation, but little has currently been published, particularly on patient populations. More research needs to be performed to evaluate its effectiveness as a rehabilitation tool compared to other rehabilitation methods. It is expected that a system, such as the CAREN, will challenge patients multifactorially (e.g. physically and cognitively) and provide biofeedback while decreasing rehabilitation time and increasing effectiveness of treatment.

链接: http://pan.ckcest.cn/rcservice//doc?doc_id=41011

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