

PP531 Quality Of Life Of Patients With Long-Chain Fatty Acid Oxidation Disorders Before And During Treatment With Triheptanoin

Eliza Kruger (EKruger@ultragenyx.com),
Deborah Marsden, Arielle Bensimon, Erin Cook,
Eli Orvis, Hongbo Yang, Jill Mayhew and Nina Thomas

Introduction. Long-chain fatty acid oxidation disorders (LC-FAOD) are a group of serious diseases in which patients are at risk of metabolic decompensation, resulting in cardiomyopathy, hypoglycemia and rhabdomyolysis and premature mortality. In addition, LC-FAOD are a burdensome disease that adversely affects quality of life (QoL) via symptoms of muscle pain, fatigue, and a difficult diet. Previous studies have reported improvements in QoL during treatment with triheptanoin as measured by short form (SF) instruments. This study sought to convert the QoL measure into a utility value for a sample of patients with LC-FAOD at baseline and 78 weeks during treatment with triheptanoin.

Methods. In an open-label Phase 2 study of triheptanoin (UX007-CL201, NCT01886378), caregivers of patients (n = 9/23 enrolled) or patients aged 18+ years (n = 6/6 enrolled) completed the SF-10 or the SF-12v2, respectively. Component summary scores at baseline and 78-week during treatment period were converted to EuroQol-Five Dimension (EQ-5D) utility (with zero representing death and 1.0 perfect health) using a published conversion algorithm (Lawrence and Fleishman 2004). Generalized linear mixed-effects models with individual-level random effects were used to estimate the utility values.

Results. At baseline, patients' utility was estimated to be 0.365 (standard error [SE] = 0.090) compared with 0.629 (SE = 0.072) 78-weeks during treatment, a significant improvement ($p = 0.0073$). In a sensitivity analysis using SF-12v2 data only (that is, only adult patients), utility estimates were 0.498 (SE = 0.084) at baseline versus 0.690 (SE = 0.068) during treatment ($p = 0.0499$). No patients had a major clinical event during the SF instrument recall period, indicating the benefit was driven by day-to-day improvement in QoL.

Conclusions. Treatment with triheptanoin resulted in a substantial improvement in daily QoL for patients with LC-FAOD. Limitations of this study include that the estimation of utilities is from a single-arm study with small sample sizes and that the assessment of utility was based on a conversion algorithm rather than direct measurement. Nevertheless, results indicate significant improvement in QoL for patients treated with triheptanoin.

PP538 Burden Of Disease For Patients With Acute Myocardial Infarction Combining Dyslipidemia In China

Mengran Zhang, Hongchao Li, Aixia Ma
and Pingyu Chen (chenpingyu220@163.com)

Introduction. Prevalence of dyslipidemia in Chinese adults is increasing rapidly. Dyslipidemia is one of the most important risk factors for acute myocardial infarction (AMI), which represents a serious disease burden to the country. However, there is no published research on the costs of Chinese patients diagnosed with AMI combining dyslipidemia. This study aimed to report key findings of the disease burden in China, including direct medical costs and direct non-medical costs.

Methods. Six hospitals from different geographic areas were selected in China for data collection. Patients who were hospitalized due to AMI combining dyslipidemia from January 1 2016 to December 31 2016 in the six sites were enrolled. Direct medical costs including inpatient and outpatient costs were extracted through electronic medical records; medical costs occurred in other healthcare institutions and direct non-medical costs were collected by a face-to-face questionnaire survey. Results were analyzed with descriptive statistics.

Results. Data of 900 patients were analyzed. There were more males (78.40%) than females. The mean age was 62.1 (SD: 11.5). The times of inpatient and outpatient per year were 0.57 and 8.67, respectively. Medium direct medical costs and medium direct non-medical costs were 31,440 RMB (Interquartile range (IQR): 21,533–48,202) (4,443 USD: 3043–6812) and 665 RMB (IQR: 351–1328) (94 USD: 50–188), respectively; while corresponding medium indirect costs per year were 659 RMB (IQR: 226–1579) (93 USD: 32–223).

Conclusions. This is the first study comprehensively analyzing the disease burden of patients diagnosed with AMI combining dyslipidemia in China. The results suggested that the medical cost of this population is still high. Hospitalization cost accounted for 81 percent of the total cost, which was around 1.3 times of the annual per capita disposable income over the same period. Therefore, the importance of providing effective clinical management as well as dyslipidemia prevention and control intervention should be highlighted, especially for middle-aged and elderly males with dyslipidemia.

PP548 The Design Of Long-term Care Insurance Payment: Base On Pilot Practice In Jingmen

Tiantian Du, Juntong Yang, Ying Li, Meng Zhang
and Yuehua Liu (liu_yuehua@163.com)

Introduction. With the aging of population, miniaturization of family size and changes of diseases spectrum, the demand for long-term care of Chinese elderly is increasing, which is challenging the existing long-term care system. China is currently carrying out pilot work for a long-term care insurance system, and Jingmen is one of the pilot cities, however more detailed research on payment is needed. Therefore, this paper draws on case-mixed-adjusted prospective payment system to provide designs for long-term care insurance in pilot cities.

Methods. Adopting a case analysis method, this paper focuses on system for payment of Skilled Nursing Facility under Part A of the Medicare program—Patient Driven Payment Model, and discusses the implementation plan of a long-term care insurance in Jingmen City from the perspectives of payment methods, payment grouping and payment standards.

Results. Currently Jingmen adopts per-diem payment for long-term care insurance, so it is necessary to establish a payment based on population characteristics and demands. So, the patients should be classified into a group for each of the five case-mix adjusted components: physical therapy, occupational therapy, speech therapy, nursing and non-therapy ancillary. In addition, this payment model also includes a “variable per diem adjustment” to account for the changes in patient costs more accurately.

Conclusions. The theoretical system of a long-term care insurance payment method is developed, and a localization plan for case-mixed-adjusted prospective payment system for long-term care insurance is provided. Therefore, Jingmen long-term care insurance payment should adopt “case-mixed adjustment”, strengthening the relationship between individual clinical characteristics and payment.

PP553 Study On The Utilization Of Medical Resources In Patients With Malignant Tumors in China

Yuehua Liu, Tiantian Du, Fan Zhang and Kun Zhao
(zk317@yahoo.com)

Introduction. Malignant tumors have become a major public health problem and their treatment cost is increasing rapidly in China, but treatment aimed at healing diseases or extending patients’ life. There is little empirical research on utilization of healthcare resources of terminally ill cancer patients. In order to explore the optimal treatment decision for patients and provide information for relevant decision makers, this study analyzed the consumption status of medical resources in patients with cancer during the whole treatment period, and the current medical resource utilization efficiency in different levels of hospital for end-stage cancer patients.

Methods. This study was based on the clinical treatment and payment data of 2,536 cases of patients with lung cancer from the medical insurance database during the period of 2007 to 2014 in Hubei province. We retrospectively analyzed patients’ medical expenditure and utilization of different medical resources during their whole treatment period as well as at the end stage.

Results. The per capita inpatient expenditures of patients under 50 years old was 193,000 CNY (27,451 USD), while that of the patients over 70 years were 80,000–90,000 CNY (11,379–12,802 USD). Secondly, the medical expenditures spent during the last 6 months of life accounted for 66.1 percent of the total expenditures. Lastly, the medical expenditure spent in tertiary hospitals accounted for 95.3 percent of the total expenditure, and the expenditure was 14,200 ± 17,030 CNY (2,019.82 ± 2,422.36 USD) per visit.

Conclusions. Population aging is not the only factor causing the rise of medical expenditure. The unclear objectives of treatment and the reverse of medical resource allocation are also important

factors to boost the growth of medical expenditure. It is necessary to improve the healthcare insurance payment system, strengthen the capacity of primary medical institutions, and develop the palliative care system in China.

PP554 Quality Assessment Of Clinical Practice Guidelines On Chronic Obstructive Pulmonary Disease Based On The Appraisal Of Guidelines For Research And Evaluation II (AGREE II) Instrument

Qian Xu, Kun Zhao, Cheng A Xin Duan, Dandan Ai and Binyan Sui (suibinyan2001@163.com)

Introduction. The scientific application of clinical evidence-based guidelines can reduce the variability of clinical practice, and standardize clinical diagnosis and treatment pathways. At present, many evidence-based guidelines on Chronic Obstructive Pulmonary Disease (COPD) prevention have been issued in countries around the world, but the procedures and evaluation strategies developed by different guidelines are not the same. This study aimed to evaluate the quality of published clinical practice guidelines (CPGs) relating to COPD using the Appraisal of Guidelines for Research and Evaluation II (AGREE II) instrument.

Methods. Databases were systematically searched PubMed, EMBASE, Wan Fang, and CNKI as well as guidelines websites on COPD prevention and treatment. The search period was from inception of the database up to May 2019. The inclusion criteria for this study are as follows: (i) published and in accordance with the definition of the practice guidelines; (ii) the main target population is COPD patients with the diagnostic criteria of the 2019 edition of the global initiative for COPD (GOLD), and the content of the guideline is related to the prevention and treatment practice of COPD; (iii) the same guide is included in the latest updated version; (iv) the published language is English or Chinese. Guidelines that met these inclusion criteria were evaluated for the quality of the AGREE II guidelines. Then, a descriptive analysis was made of the consensus that exists in the guidelines.

Results. A total of fifteen guidelines/Consensuses Statements were included in the study. Two guidelines were assessed as recommended, eleven guidelines were assessed as recommended with modifications and two guidelines were not recommended. The mean scores of the included guidelines in the six domains (scope and purpose, personnel involved in guideline development, rigor of development, clarity, applicability, independence) were 90 percent, 72 percent, 49 percent, 96 percent, 60 percent, 69 percent, respectively. Thus, the study identified a consensus that disease risk factors and recommended interventions were mentioned in the guidelines, and that they comprehensively evaluated the quality of guideline reporting to provide reference for standardizing the development of practice guidelines for COPD in China.

Conclusions. The overall methodological quality of COPD CPGs should be improved. The key recommended areas for improvement include standardization of guideline report writing and synthesis of the latest and best evidence, to develop CPGs for COPD to improve the quality of clinical diagnosis and treatment for COPD.