ECONOMIC BURDEN OF PAINFUL DIABETIC PERIPHERAL NEUROPATHY IN KOREA

Ko BC, Cho BY, Kim CH, Ht L, Lee JH, Park TS, Won JC, Park HJ, Ko SK*  
*In University Sanggye Paik Hospital, Seoul, South Korea; ¹The Catholic University of Korea, St. Mary’s Hospital, Seoul, South Korea; ²Sejong General Hospital, Bucheon-Si, Gyeonggi-do, South Korea; ³Daegu Catholic University Medical Center, Daegu-City, South Korea; ⁴Chosun National University Hospital, Jeonju S, Jeollabuk-do, South Korea; ⁵Pfizer Pharmaceuticals Korea Ltd, Seoul, South Korea  
OBJECTIVES: The painful diabetic peripheral neuropathy (DPN) is the most common complication of diabetes. Despite the prevalence of painful DPN and its potential risk of further complications, there has been no study on the burden of painful DPN on the patients in Korea. This study was conducted to assess the patient-level economic burden among subjects with painful DPN. METHODS: A cross-sectional multicenter study was performed using a standardized questionnaire, to estimate recent 3-month health-care cost and productivity loss of diabetic patients. A total of 4000 patients were recruited from 40 hospitals between December 2009 and May 2010. Cost items mainly included health-care cost such as outpatient, pharmacy, inpatient, and laboratory medicine; non-health-care cost such as traffic expenses, nursing cost, complementary, and alternative medicine. Cost included insurance-covered cost as well as patient’s out-of-pocket expenses during 3 months. To estimate productivity loss due to morbidity, days away from work due to painful DPN were also investigated. RESULTS: Among 2681 diabetic patients completed questionnaire (response rate = 67.0 %), 26.3% (n = 706) had painful DPN. Numbers of outpatient visit within 3 months were higher in patients with painful DPN compared with those without painful DPN, 3.79±2.83 and 3.25±2.36, respectively (P<0.01). Total costs over 3 months were also higher in patients with painful DPN than in those without painful DPN (1,049,477 ± 1,549,446 and 721,933 ± 1,394,970 KRW, respectively, P<0.01). diabetics had been from work and reported the decreased work productivity, respectively. CONCLUSIONS: Painful DPN increased health-care cost and decreased work productivity of diabetic patients in Korea.
CONCLUSIONS: The cost of diabetic foot treatment in Russia increased about 10 years ago. We suggested that the data of earlier studies could not reflect present of expenditures. Therefore, we launched a study of the cost of diabetic foot treatment in present conditions. METHODS: We have analyzed the data of 146 inpatients treated in diabetic foot department at Scientific Centre for Endocrinology (Moscow, Russia) in 2008–2009. The patients’ data were input into a specially designed medical information system. The patients were sorted into three main groups: 1) diabetic polyneuropathy without diabetic foot (N = 37); 2) diabetic foot without amputations (N = 58); and 3) patients with amputations due to diabetic foot (N = 51). To calculate the total cost of DF treatment, costs of diagnostic procedures, medical treatment, and hospital treatments were used. RESULTS: Mean cost of treatment of one DF patient was equal to 8,170 rubles (US$2645), which is about 30% higher than previously reported figures. It is mainly due to larger introduction of recombinant insulins into routine treatment of diabetic foot patients. Mean cost of treatment of DF patients with amputations was significantly higher than in those without amputations, mostly due to additional costs of surgical treatment and longer stay in a hospital. Moreover, the mean cost of medicines for DF patients with amputations was almost twice higher than for DF patients without amputations. CONCLUSIONS: The cost of diabetic foot treatment in Russia increased approximately 30% during last 10 years. The results will be used to assess cost-effectiveness of various drug treatments of diabetic foot.

ECONOMIC VALUE OF THE EASYPOD® ELECTRONIC AUTOINJECTION IN IMPROVING THE RESPONSE TO GROWTH HORMONE (GH) IN CHILDREN WITH IDIOPATHIC GROWTH HORMONE DEFICIENCY (IGHD): A COST-CONSEQUENCE ANALYSIS

Chaneau P, Latour S, Mauriat A

University Claude Bernard Lyon—Hôpital Femme Mère Enfant, Lyon, France. 1Merck-Serono S.A., Geneva, Switzerland. 2Stratas Partners, Basel, Switzerland

OBJECTIVE: Response to GH therapy in children with IGHD can be further optimized by reducing the time of injections. The aim of this clinical study is to evaluate the impact of an electronic autoinjector that objectively monitors drug administration, enabling differentiation of poor adherers from low responders. METHODS: A discrete event simulation model was developed to model continuous, intermittent (four injections/week) and discontinued GH infusion of patients with IGHD until final height. A cohort of children (age: 4–12 years, growth delay: −4.0.−2.5 standard deviation scores (SDS) at baseline) was modeled to initiate GH (0.03 mg/kg/day). Annual height gains of 1.2 to 0.8 SDS in year 1 were assumed to be 30% and 60% lower in each subsequent year of continuous and intermittent use, respectively. Baseline nonadherence was 9.9% persons per 100 person-years.