patients with visit 2 data available for ITT analysis (152 patients enrolled) were included (mean age 48 years, 51% female, mean BMI 27 kg/m², 75% sedentary lifestyle). Upon inclusion, 21% had never received any treatment, 44% were receiving, or had received antacids, 21% H2-receptor blockers, 46% had received PPI therapy proton pump inhibitors (PPI) therapy (34% omeprazole, 31 esomeprazole, 21% pantoprazole, 11% rabeprazole, 3% lansoprazole). After visit 1 physicians changed treatment in favor of full-dose PPIs (94% of cases), mainly esomeprazole (75%) and stopped almost all h2-receptors blockers (1%). Seventy-five percent of patients were in acute phase treatment after visit 1 which changed to maintenance treatment phase in 91% of patients after visit 3. There was a concomitant dose reduction of 40 mg to 20 mg for the most prescribed PPI esomeprazole. Forty-percent of patients became The prescribed dose was changed to a median of 20 mg at visit 2 in 32% of patients. The severity of GERD symptoms decreased substantially throughout the study with 84% of patients having moderate or severe GERD in visit 1, 23% in visit 2 and 11% in visit 3. Concurrently, the GIS scores decreased significantly (−1.27 for upper GI symptoms, −0.92 for other related GI symptoms and −0.85 for the impact on life; p < 0.001). The GIS was judged to be helpful for approximately 80% of the patients by the physicians. At all visits, the GIS mean-scores increased markedly with increasing severity of disease (clinical judgment). The correlation between GIS mean-scores and endoscopy findings or the physician’s judgment of the usefulness of the GIS was less pronounced.

CONCLUSIONS: GIS scores improved with GERD PPI treatment and were judged helpful by the physician. GIS may thus have an added value over these assessments in determining the appropriate treatment and evaluating the patient’s response to this treatment.

HEALTH CARE INTERVENTIONS—Cost Studies

PHC2

IMPACT OF LOCAL HAEMOSTATIC AGENTS IN ABDOMINAL SURGERY ON HOSPITAL BUDGET

Krysanov J, Kulikov A, Yagudina RI
Moscow Medical Academy, Moscow, Russia

OBJECTIVES: To assess the effectiveness and economic consequences for Moscow hospitals of the “ready-to-use” collagen patch coated with thrombin and fibrinogen—trade name TachoComb—compared with current haemostatic practice in

Abstracts

PHC1

TREATMENT OF DISCOSTENIC LOW BACK PAIN WITH INTRADRICAL ELECTROTHERMAL THERAPY [IDET]. A MINIMALLY INVASIVE, LOW COST ALTERNATIVE TO OPEN SURGERY: A PROSPECTIVE 24-MONTH OUTCOMES STUDY IN 50 CONSECUTIVE PATIENTS

Assietti R1, Morosi M1, Meani L1, Block IE2, Schultz M3, Rohan B4
1Ospedale Fatebenefratelli e Ospedale, Milano, Italy, 2Jon E Block PhD Inc, San Francisco, CA, USA, 3Pharmaccess Inc, Westmount, QC, Canada, 4Smith & Nephew Inc, Memphis, TN, USA

OBJECTIVES: Pathologic deterioration of intervertebral discs, characterized by anular tears, can cause severe, unremitting low back pain [LBP] resulting in loss of function and quality of life for millions of individuals worldwide. Patients experiencing severe back symptoms beyond six months have poor prognosis for recovery with conservative management alone. Open surgical intervention such as spinal fusion and artificial disc replacement are being utilized with escalating frequency, however costs and risks are high. Performed in the outpatient setting, intradiscal electrotethermal therapy [IDET] is minimally invasive, less costly alternative to surgery for patients nonresponsive to conservative care. This study prospectively evaluated effectiveness of IDET in 50 consecutive adult patients refractory to conservative care of at least six months duration. METHODS: Using MRI and discography to establish internal disc disruption, 50 patients with lumbar discogenic pain were identified, underwent IDET treatment and followed for 24 months. Back pain severity (11-point numeric scale) and back function (Oswestry disability index [ODI]) were evaluated pre-treatment, 12 and 24 months post-procedure. Clinical success defined as lack of follow-up surgery, ≥2-point pain, and ≥15-point ODI improvement. RESULTS: Average 68% and 66% improvements in pain and ODI, respectively, between pre-treatment and 24 months (p < 0.0001 for both comparisons). Global clinical success rate was 78% (39/50). No complications occurred during IDET procedure. No post-procedural adverse events such as infections or neurological sequelae reported. CONCLUSIONS: The significant and robust clinical improvements in function through 24 months and 78% global success rate achieved in this study compare favorably with previously published results for IDET using similar patient selection criteria. Careful patient selection based on discography and imaging may improve outcomes. Risk of procedure-related adverse events is low. IDET offers a safe, low-cost treatment alternative with demonstrated durable, long-term clinical benefits in the continuum of care of patients with discogenic LBP.

PROTON PUMP INHIBITORS MARKET IN PRIMARY CARE SETTING

Cammarota S, De Portu S, Citarella A, Menditto E, Cuomo R
University of Naples, Naples, Italy

OBJECTIVES: In some European Union countries in recent years the use of proton pump inhibitors (PPIs) has greatly increased. In march 2006 in Italy lansoprazole came off patent and became a relatively cheap treatment. Several national and regional measures to rationalise PPIs spending growth were taken to promote the choice of less expensive PPI, lansoprazole, regardless of its antisecretory potency. The goal of this study was to compare general practitioners’prescription (GPs) of different PPIs and explore how GPs PPI prescribing changes following the loss of lansoprazole patent. METHODS: We extracted all records of PPI prescribing within a General Practitioner Research Database of 99 GPs located in Naples, Italy, and analysed them using Microsoft SQL Server 2005. All records for patients who had been prescribed a PPI were divided into calendar years from 2005 to 2007 (the year prior to and following lansoprazole). PPI consumption were quantified using Defined Daily Dose (DDD). RESULTS: The total volume of PPI’s prescribing increased steadily over the 3 years. The proportion of defined daily doses accounted for by lansoprazole was 11.8% in 2005 rising to 35.9% in 2007. The contribution of omeprazole, the most often PPI prescribed, to total PPIs prescriptions decreased from 43.0% to 22.7% in the same period, while esomeprazole contribution remained constant. Following the loss of patent, new lansoprazole prescriptions increased substantially; 32.7% of subject received an added value over these assessments in determining the appropriate treatment and evaluating the patient’s response to this treatment.
urgent abdominal surgery. METHODS: Seventy abdominal surgeons from 20 Moscow hospitals were randomly selected for a structured interview. The interviewing was carried out from May to July 2007. Forty-four of them had previous experience with use of the thrombin and fibrinogen coated collagen patch, 26 of them were without such experience. Using a Visual Analogue Scale (VAS), the experts first evaluated their satisfaction with different haemostatic practices. Then they assessed the relative hospital resource use and outcome consequences of the collagen patch compared with alternative haemostasis management techniques. These assessments were subsequently valued in a budget impact model using Moscow hospital cost estimates and a univariate sensitivity analysis was applied. RESULTS: As to the surgeons’ satisfaction, the patch application got the highest score of the different haemostatic techniques in all types of surgeries. As to resource use, the patch resulted in a incremental reduction in the following resource components: mean operating time in all surgery types: 24 min per patient (liver—36 min, herni omy—25 min, intestine—24 min, stomach—23 min, pancreas—21 min, gall-bladder—18 min), post-operative total hospital stay: 3 days, including 1.3 ICU days, and use of transfused blood 200 ml (min—98 ml, max—287 ml). Also, complication rates were reduced incrementally: internal hemorrhages by 12.45%; suture failure by 6.63%; infectious complications by 4.9%. The mean cost savings following the use of the patch compared to alternative haemostatic agents in all types of surgeries were RUR36.37 (€103.6 for July 2007). CONCLUSIONS: According to assessment by surgical experts, the application of a thrombin and fibrinogen coated collaged patch in abdominal surgery potentially leads to reduction of post-operative complications, reduction of surgery time, ICU and hospital stay in the Moscow hospital setting. Finally it is likely to save net costs in all types of abdominal surgeries.

PHC4

COST-EFFECTIVENESS OF HARMONIC SCALPEL USE VERSUS CONVENTIONAL TOTAL THYROIDECTOMY

Ciccetti A1, Lombardi C2, Raffaelli M1, Ruggeri M1, Di Bidino R1, Attinà G2

1Catholic University of Sacred Heart, Rome, Italy, 2University Hospital “A.Gemelli”, Rome, Italy, 3Johnson & Johnson Medical Holding, Rome, Italy

OBJECTIVES: To assess efficacy, safety and cost-effectiveness of ultrasonic dissector, Harmonic Scalpel (HS) versus conventional non-video-assisted thyroidectomy (nHS), from hospital and societal perspectives. METHODS: A total of 198 patients eligible for total thyroidectomy (TT) were randomly assigned to surgery with HS (96) or nHS (102) and followed until 3 months after discharge. Main clinical outcomes were: pain (VAS score), QoL (EQ-5D), complications, cosmetic results. Direct medical and indirect costs were prospectively collected as well. RESULTS: HS led to shorter operative time (HS: 54.16 vs nHS: 76.36 minutes, P < 0.001), as total operative room (OR) occupation time (76.86 vs 100.59 minutes, P < 0.001). QoL was better in HS group one month (0.90 vs 0.83; P < 0.002), and 3 months after surgery (0.91 vs 0.84; P = 0.002). Less postoperative pain was perceived by HS patients 6 hour after surgery (HS: 41.35 vs nHS: 44.56) but similar after 48 hours (HS: 22.75 vs nHS: 20.97). A total of 71% HS patients were satisfied with cosmetic result versus 55% nHS (P = 0.029). No significant difference resulted in complications rate and voice changes. Total medical direct costs were €2400.34 and €2340.52 for HS and nHS, respectively. From hospital perspective HS offers a cost saving of €119/patient, mainly due to less charges of OR personnel (HS: €294.19 vs nHS: €452.90), OR occupancy (HS: €620.61 vs nHS: €615.40), drugs (HS: €63.29 vs nHS: €93.28), and diagnostic exams (HS: €132.91 vs nHS: €160.36). No statistical difference was found in loss of productivity up to 3 months (HS: €385.51 vs nHS: €377.71). CONCLUSIONS: Harmonic is safe and efficacious in conventional TT, allowing a significant reduction of the operative time (~22 min), total OR occupation time (~24 min), and better QALY at 3 months (HS:0.23 vs nHS:0.21), without increasing complications rate and saving €119 from a hospital perspective. Harmonic should be adopted in TT to reduce impact on individual life and on society.

PHC5

A COST-EFFECTIVENESS ANALYSIS OF RHBMP-2 IN SPINE FUSION SURGERY IN THE NETHERLANDS

Van Genugten M1, Chhabra A1, Alt V1

1medtronic Trading NL B.V, Heerlen, The Netherlands, 2Medtronic Europe SA, Tolocheznaz, Switzerland, 3University Hospital Giessen-Marburg, Brackenheim, Germany

OBJECTIVES: Chronic low-back pain related to osteoarthritic changes of the lumbar spine has a significant economic impact on health care budgets worldwide. Anterior-Lumbar-Interbody-Fusion (ALIF) surgery can be an effective treatment option after non-operative therapy fails. Frequently, the affected vertebral