cation was developed as an alternative to the complete wrap in order to reduce the prevalence of post-operative symptoms such as bloating and dysphagia. **OBJECTIVE:** To systematically review the effectiveness of two different surgical techniques of laparoscopic fundoplication (partial versus total) for the treatment of GORD in adults. **METHODS:** A systematic search of the literature was carried out. All randomised trials comparing total versus partial laparoscopic fundoplication were included. The main outcome measure was the number of patients who were symptom free at follow-up. Other outcome measures reviewed included clinical outcomes, PROs and QoL. In addition any long-term follow-up data were reviewed. **RESULTS:** Seven randomised trials identified met the inclusion criteria for this review. All trials included compared laparoscopic total fundoplication compared to partial fundoplication. Post-trial follow-up results varied between 3–6 months and a variety of outcome measures were reported. One study reported 12-month results. There was no reporting on quality of life, though three trials reported PROs. Dysphagia was more frequently reported in patients undergoing total fundoplication compared to partial warp RR 2.82 [95% CI: 18.4, 4.32]. No significant differences in post-operative bloating was found between the two surgical techniques. There was no significant difference in the number of patients reporting either "good" or "excellent" outcomes between techniques RR 0.97 [95% CI: 0.89, 1.05]. **CONCLUSIONS:** Evidence from trials supports the view that both total and partial fundoplication are clinically effective for treating GORD. However, long-term efficacy and QoL data are needed to choose one technique over the other.

GI DISEASES/DISORDERS

GI DISEASES/DISORDERS—Cost Studies

PGI3

COST-UTILITY ANALYSIS COMPARING ESOMEPRAZOLE WITH THE ORO-DISPERSIBLE FORMULATION OF LANSOPRAZOLE IN THE INITIAL TREATMENT OF REFLUX OESOPHAGITIS

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OBJECTIVES: To assess the cost-effectiveness of esomeprazole (Nexium) compared to lansoprazole (Zoton FasTab) in the initial treatment of reflux oesophagitis over 12 weeks from the perspective of the UK NHS. **METHODS:** A probabilistic decision analysis model was constructed using Treeage DATA™ 4.0 to depict the sequential management of patients with unhealed reflux oesophagitis. Treatment pathways were based on a published 8-week UK healing model, however the model time horizon was extended by an additional 4 weeks to ensure the costs incurred by patients who remained unhealed after 8 weeks were also included. Beta distributions for the 4 and 8 week healing rates were calculated from a meta-analysis of the two available head-to-head studies comparing esomeprazole 40 mg (4 weeks – r = 2087, n = 2765; 8 weeks r = 342, n = 678) and lansoprazole 30 mg (4 weeks – r = 1984, n = 2760; 8 weeks r = 347, n = 776) in the healing of reflux oesophagitis. These studies used the capsules formulation of lansoprazole. This data have been used, as the capsule and oro-dispersible formulation are bioequivalent. Triangular distributions were fitted to utility values reported by a study using the rating scale method in patients with gastro-oesophageal reflux disease. Estimates of resource utilisation were obtained from a survey of UK-based clinicians, and were multiplied by national published resource unit costs at 2003/04 prices. **RESULTS:** The mean cost per QALY gained with esomeprazole and lansoprazole were £1482 and £1633 respectively. Esomeprazole dominated lansoprazole (i.e. was more effective and less expensive) in 86.8% of the 10,000 Monte Carlo simulation patient iterations. Applying a willingness to pay threshold of £20,000 per QALY similar to that used by NICE indicates that esomeprazole is cost-effective in 98.9% of the 10,000 patient iterations. **CONCLUSIONS:** Esomeprazole is more cost-effective than the oro-dispersible formulation of lansoprazole in the initial treatment of reflux oesophagitis.

PGI4

INPATIENT COSTS OF LIVER CIRRHOSIS IN THE UNITED STATES: A RETROSPECTIVE CLAIMS DATA ANALYSIS, 1993–2001

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OBJECTIVE: To determine the economic burden of liver cirrhosis, a common outcome of chronic hepatitis B, hepatitis C, and alcoholic liver disease. **METHODS:** Hospital inpatient admission records were analyzed for 1993–2001 in a health insurance claims database (MarketScan® Database) for 3.5–5.0 million employees enrolled annually. All patients >18 years old admitted with a primary diagnosis of cirrhosis (ICD-9-CM code 571.2 or 571.5) were included in the analysis. For each patient identified, all admissions in a year were included except admissions related to hepatocellular carcinoma, liver transplantation, and admissions unlikely to be due to cirrhosis based on review of all primary and secondary diagnoses for each admission. Cost estimates were adjusted for inflation using the medical care component of consumer price index and are reported in 2002 US$. **RESULTS:** A total of 2073 cirrhosis patients with 4049 inpatient admissions were identified during the 9-year period. The average annual number of admissions per patient was 1.5 (95% confidence interval [CI]: 1.5–1.6); average length of hospital stay was 11.1 days (95% CI: 10.1–12.1), which decreased from 12.1 days in 1995 to 8.1 days in 2000. The annual cost of inpatient care per patient also decreased, from $31,244 in 1993 to $19,220 in 2000 for an average of $27,248 (95% CI: $24,247–$30,250); 86% (95% CI: 84%–87%) was for hospitalization and 7% (95% CI: 6%–8%) for physician costs. **CONCLUSIONS:** Annual cost of inpatient care for liver cirrhosis in the United States is >$27,000 per patient hospitalized, more than twice the average annual cost for all hospital admissions (~$12,000), and nearly seven times the per capita annual medical care expenses (~$4176). With >25,000 annual deaths from cirrhosis, this causes substantial economic burden to society, and underscores the need to prevent development of cirrhosis by preventing hepatitis B, hepatitis C, and alcohol abuse.

PGI5

COST-EFFECTIVENESS OF TREATING ADULTS WITH CHRONIC HEPATITIS C (CHC) AND PERSISTENTLY NORMAL ALANINE AMINOTRANSFERASE (PNALT) WITH PEGINTERFERON ALFA-2A (40 KD) (PEGASYS) PLUS RIBAVIRIN (COPEGUS)

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OBJECTIVES: A randomized, placebo-controlled trial demonstrated sustained virological responses (SVR) exceeding 40% in adult patients with PNALT/CHC using peginterferon alfa-2a (40-kD) plus ribavirin (Peg/RBV) (Zeuzem. Hepatology 2003; 208A). We computed prognosis, costs, and cost-effectiveness of