ECONOMIC BURDEN OF GERD AND PUD IN AN EMPLOYED POPULATION
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OBJECTIVES: The objective of this study was to evaluate the differences in reported levels of absenteeism and direct medical costs between employees diagnosed with gastroesophageal reflux disease (GERD) and/or peptic ulcer disease (PUD) and a matched-cohort with neither disease. METHODS: Data were extracted from the MarketScan Research Database, a Health Insurance Portability and Accountability Act compliant database consisting of medical and prescription claims of employees linked to the absenteeism files of their employers. Employees with an ICD-9 code for GERD/PUD, and a matched cohort with neither disease, were identified from January 1, 1997 to December 31, 2000. Demographic, absenteeism, and resource-utilization variables were collected for all eligible subjects. Analysis of variance was used to test the null hypothesis that the four populations have equal means of absenteeism rates. RESULTS: In all, 62,05 workers with GERD, 2,702 workers with PUD, and 42,902 matched-cohort subjects were identified. There was no significant difference between the GERD and PUD groups in health care costs, except total prescription costs that were higher in the GERD group (p < 0.001). Work-absenteeism rates appeared to increase in the expected fashion, with lowest rates in the control group and highest rates in the comparison group. The magnitude of this difference was 0.3 sickness-related absence days per individual per year between the groups with and without gastrointestinal disease. For all-cause absences, the difference was higher with 1.5 absence days per year. Projections of this data to an average sized Fortune 500 company of 250,000 employees would translate to total direct costs of $312 million and indirect costs of $4.75 million per year. CONCLUSIONS: Direct medical cost and worker absenteeism, in GERD and PUD employees creates a significant burden on the employee community.

FECAL LACTOFERRIN ASSAY FOR THE INITIAL DIAGNOSTIC APPROACH TO SYMPTOMATIC PATIENTS WITH ILEAL POUCH-ANAL ANASTOMOSIS: A COST-EFFECTIVENESS ANALYSIS
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OBJECTIVES: Fecal lactoferrin (FL) is a non-invasive marker, able to distinguish between inflammatory and non-inflammatory causes of symptoms in patients with ileal pouch-anal anastomosis (IPAA). We assessed the cost-effectiveness (CE) of the FL assay as the initial screening test for the evaluation of symptomatic patients with IPAA. METHODS: The frequencies of pouchitis, irritable pouch syndrome, cuffitis, and Crohn’s in symptomatic patients were estimated to be 50%, 36%, 7%, and 7% respectively. The FL assay has a sensitivity of 100% and a specificity of 85% (7 mg/ml threshold) to distinguish between inflammatory and non-inflammatory causes of symptoms. Four competing diagnostic strategies [empiric metronidazole therapy (txMTZ), initial pouch endoscopy/biopsy (testBiop), initial FL assay then MTZ when warranted (testFL + MTZ), and FL assay then pouch endoscopy/biopsy when warranted (testFL + Biop)] were modeled in a decision tree. Response rates to all therapies were based on current literature and expert opinion. Effectiveness equaled the number of days out of 30 that a patient received responsive therapy. Procedural and drug costs were estimated from the 2003 Medicare fee schedule and current average wholesale price, respectively. RESULTS: In the base case, the average cost per patient was $244 for testFL + MTZ, $251 for txMTZ, $408 for testFL + Biop, and $431 for testBiop. All competing strategies were more effective than test FL + MTZ, with incremental effectiveness ranging from 2.0 to 0.1 days at an incremental cost ranging from $8 to $1263. The incremental cost-effectiveness ratio (ICER) for txMTZ and testFL + MTZ of only $8 does not reflect unnecessary antibiotic exposure resulting in delayed diagnosis, adverse effects, antimicrobial resistance, or patient preference for the 50% relative decrease in invasive endoscopic procedures. Results were robust in multivariate sensitivity analyses. CONCLUSIONS: FL measurement prior to treatment with MTZ is a less costly strategy with only a marginal decrease in effectiveness when compared to empiric antibiotic therapy and other diagnostic strategies.

A PHARMACOECONOMIC ASSESSMENT OF THE BENEFITS AND COSTS OF MANAGING IMMUNOSUPPRESSION IN POST-LIVER TRANSPLANT PATIENTS: A UNIVERSITY HOSPITAL PERSPECTIVE
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OBJECTIVES: The overall aim of this investigation was to determine the best use of post-transplant immunosuppression therapies, in terms of clinical and economic outcomes, for the liver transplant population at the University of Colorado Hospital (UCH), regardless of expected reimbursement. METHODS: Patients were sequentially assigned to either tacrolimus (FK) or emulsified cyclosporine (CYA) with or without mycophenolate