INCREASED MANAGEMENT NEEDS AND CARE COSTS FOR NURSING HOME RESIDENTS WITH CLOSTRIDIUM DIFFICILE ASSOCIATED DIARRHEA

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OBJECTIVE: To identify differences in management levels and costs between nursing home (NH) residents with and without Clostridium difficile associated diarrhea (CDAD). METHODS: Minnesota long-term care data from 1995–2001 were examined for residents with (ICD-9-CM code: 008.45) and without CDAD. NH residents are assigned to one of eleven management categories reflecting low to very high care needs, based on assessment of dependence in activities of daily living (ADL), need for skilled nursing and behavior. Reimbursement rates are set for each management category based on expected care needs. Dependence in ADL, need for skilled nursing, behavior and assigned management category were analyzed. Costs were estimated by applying Minnesota NH reimbursement rates, adjusted to national values to each management profile. Cost estimates (2002 US$) include room and board, nursing and ancillary staff care. RESULTS: CDAD was coded for 260 (0.1%) of the 220,123 NH residents analyzed. Age and gender were similar for both groups. Residents with CDAD had significantly more bowel incontinence (p = 0.000), required more skilled nursing services (p = 0.000) and were more dependent in walking (p = 0.001), transferring (p = 0.002), bed mobility (p = 0.003), as well as in, albeit not statistically significant (p > 0.5), dressing, bathing and eating. Residents without CDAD had significantly more (p = 0.001) behavioral problems and were slightly more dependent (p > 0.05) in grooming. Increased ADL dependency and need for skilled nursing resulted in residents with CDAD being assigned to higher management categories significantly (p = 0.000) more often than those without CDAD. This increase in management results in an additional $2985 in care costs annually per NH resident with CDAD, on average. CONCLUSIONS: CDAD constitutes a physical burden to the resident and an economic burden to the long term care system in terms of direct care costs, as well as opportunity costs due to the need for increased skilled nursing services.

A COST UTILITY ANALYSIS OF PEGINTERFERON ALFA-2A (40 KD) VERSUS PEGINTERFERON ALFA-2B (12 KD) FOR THE TREATMENT OF CHRONIC HEPATITIS C (CHC) IN THE UK

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OBJECTIVES: The National Institute for Clinical Excellence (NICE) recently published guidance on the use of peginterferon alfa-2a (40 KD) and peginterferon alfa-2b (12 KD) for the treatment of adults with CHC (http://www.nice.org.uk/pdf/TA075guidance.pdf). However, from a cost-effectiveness perspective, this guidance does not differentiate between either the efficacy or the costs of the two treatments. Therefore, in the absence of any direct head-to-head trials, a reliable indirect comparison may create a more informed, evidence-based choice for payers and clinicians. METHODS: The Bucher method (J.Clin Epidemiol 1997;50:683–91) is a mathematical technique that indirectly compares drugs without bias. Indeed, evidence suggests (Song, et al. BMJ 2003;326:472) that results calculated with this method are not significantly different from those obtained using direct comparisons. We therefore used this method to evaluate the relative treatment effects of the two peginterferons in combination with ribavirin, compared to a common comparator (conventional interferon alfa plus ribavirin). This allowed the relative effectiveness of the two drugs to be compared. These results, expressed as adjusted sustained virological response (SVR) rates, were then entered into a previously published Markov model to assess the incremental cost-effectiveness. RESULTS: Following adjustment for SVR rate in the common control arms (by Bucher method), peginterferon alfa-2a (40 KD) plus ribavirin resulted in a higher number of expected discounted quality-adjusted-life-years (QALYs) in both HCV genotype 1 (14.12 vs. 14.08) and non-1 (14.95 vs. 14.68) patients compared with peginterferon alfa-2b (12 KD) plus ribavirin. Peginterferon alfa-2a (40 KD) plus ribavirin also generates lower direct NHS (National Health Service) costs for genotype 1 (£24,064 vs. £24,488) and non-1 patients (£11,446 vs. £13,332) than peginterferon alfa-2b (12 KD) plus ribavirin. CONCLUSION: Compared to peginterferon alfa-2b (12 KD) plus ribavirin, peginterferon alfa-2a (40 KD) plus ribavirin is likely to be the dominant treatment strategy for patients with CHC in the UK, generating better outcomes (QALYs), with lower direct NHS costs.

ANTIMICROBIAL TREATMENT OF ACUTE OTITIS MEDIA AND ITS PHARMACOECONOMIC ANALYSIS IN SLOVAKIA

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OBJECTIVES: Acute otitis media (AOM) is an important problem mainly in children age. It often results in serious illnesses such as pneumonia, meningitis and accumulated fluid can cause significant hearing impairment, and may interfere with the development of normal speech in infancy. Antimicrobials are treatment of choice. Our objective was to analyze antibiotic prescribing and evaluate cost of antimicrobial treatment acute otitis media. METHODS: Same protocols and methodology was applied for multicentric study; 4 weeks prospective study in November 2003; 66 paediatricians in 5 Slovak cities. Validation of antibiotic prescribing according guidelines. CMA (cost-minimisation analysis) was used. Utilisation of antibiotics in WHO ATC/DDD system. RESULTS: Out of 326 patients, to 179 (54.9%) were indicated antibiotic treatment. The most frequent prescribing antibiotic were co-amopenicillins (J01CR) in 3 patients (31.2%, 229.5 DDD), second were penicillins (J01CE) in 37 cases (21.4%, 143 DDD), then cephalosporins (J01D) in 35 cases (20.2%, 129 DDD), aminopenicillins (J01CA) in 24 cases (13.9%, 135.4 DDD), macrolides (J01FA) in 18 cases (10.4%, 109 DDD). The largest rate of total cost for antimicrobial therapy of AOM was spending for alternative choices: co-amopenicillins (36.5%), cephalosporines (24.3%) and macrolides (24.1%). Cost for amoxicillin as first choice drug was 4.3%, for alternative antimicrobials 84.9% and other antimicrobials (10.8%). CONCLUSIONS: Acute otitis media is serious infection illness which needs to be cured by antimicrobials. More often were indicated alternative antibiotics, with more expensive average cost for therapy. Reasonable use of antibiotic is necessary to maintain the resistance at low level and aim to decrease total cost.