OBJECTIVE: An estimated 1.25 million Americans are chronically infected with hepatitis B virus, many of whom develop severe and potentially fatal liver diseases. Despite the high prevalence and serious health consequences, little is about the impact on quality of life of disease states resulting from chronic HBV infection. The objective was to estimate preferences (ratings and utility weights) for six hepatitis B-related disease states among infected persons.

METHODS: Utility weights for six disease-related health states were elicited from a sample of 56 patients chronically infected with HBV in San Francisco using a standard gamble. Probability wheels with 2-color pie charts for the relative probabilities of perfect health and death were employed as props.

RESULTS: The mean age was 51 yr (standard deviation: 12, range: 20 to 77 yr) and 77% were men. Mean utilities were: 0.72 (95% confidence interval: 0.68; 0.79) for chronic hepatitis B; 0.70 (0.65; 0.77) for compensated cirrhosis; 0.42 (0.35; 0.47) for decompensated cirrhosis; 0.48 (CI: 0.40; 0.52) for hepatocellular carcinoma; 0.62 (0.36; 0.67) in the first year after liver transplant; and 0.72 (0.65; 0.77) after first year post-transplant.

CONCLUSION: These utility values, the first published on patients in the United States, indicate that health states resulting from chronic HBV infection substantially lower patients’ quality-of-life. These preferences (utility weights) for health states can be incorporated into many aspects of medical decision making, including summary measures of health related quality of life, monitoring population health, bedside clinical decision making, and in technology assessment. For all health states, the utilities collected here were lower than published estimates that are based on clinicians opinion.

PIN15

IMPACT ON QUALITY OF LIFE OF HEALTH STATES INDUCED BY CHRONIC HEPATITIS B INFECTION: ESTIMATES FROM UNINFECTED AND INFECTED PERSONS IN THE UK

Ossa DF, Briggs AH, Tafesse E, Iloeje U, Mukherjee J, Lozano-Ortega G, Levy A
1Oxford Outcomes, Oxford, UK; 2University of Glasgow, Glasgow, UK; 3BMS, Wallingford, CT, USA; 4Oxford Outcomes, Vancouver, Britis Columbia, Canada

OBJECTIVE: Although the incidence of the hepatitis B virus in the UK is low, persons with chronic infection can develop severe and potentially fatal liver diseases. The objective was to estimate preferences (ratings and utility weights) for six hepatitis B-related disease states among uninfected and infected persons.

METHODS: Three hepatologists characterized the typical effects of symptoms on health-related quality of life. Standard gamble (SG) utility weights for six disease-related health states were elicited from a sample of 100 uninfected persons and 87 patients chronically infected with HBV in the UK. Probability wheels with 2-color pie charts for the relative probabilities of perfect health and death were used as props.

RESULTS: The mean age of patients was 43 y and 46 y for uninfected persons; and 57% and 47% were men, respectively. For patients and uninfected persons, respectively, mean SG utilities were: 0.77 (95% confidence interval: 0.71; 0.81) and 0.82 (0.78, 0.85) for chronic hepatitis B; 0.73 (0.65, 0.77) and 0.83 (0.80, 0.87) for compensated cirrhosis; 0.34 (0.25, 0.39) and 0.36 (0.30, 0.42) for decompensated cirrhosis; 0.36 (0.28, 0.41) and 0.46 (0.39, 0.52) for hepatocellular carcinoma; 0.56 (0.49, 0.62) and 0.71 (0.65, 0.76) in the first year after liver transplant; and 0.67 (0.59, 0.73) and 0.82 (0.78, 0.86) after first year post-transplant.

CONCLUSION: These utility values, the first published on patients or uninfected persons in the UK, indicate that health states resulting from chronic HBV infection substantially lower patients’ quality-of-life. The mean SG utilities were systematically lower for infected than for uninfected persons. These preferences for health states can be incorporated into many aspects of medical decision making, including summary measures of health related quality of life, monitoring population health, bedside clinical decision making, and in technology assessment.

PIN16

MEDICAL COSTS ASSOCIATED WITH NON-ADHERENCE TO ANTIRETROVIRAL THERAPY IN HIV-POSITIVE PATIENTS

Merito M1, Ammassari A2, Trotta MP3, Bonaccorsi A4, Antinori A1, D’Arminio Monforte A5
1Università di Pisa, Pisa, Italy; 2Università Cattolica del S. Cuore, Roma, Italy; 3Istituto Nazionale per le Malattie Infettive, Roma, Italy; 4Università di Milano, Milano, Italy

OBJECTIVES: To compare the direct health costs of HIV-positive patients reporting sub-optimal intake of antiretroviral therapy (ART) with those of patients reporting full adherence.

METHODS: 546 subjects from the Italian multicenter observational study ICoNA (Italian Cohort Naive Antiretrovirals) were followed between 1997 and 2004. Non-adherence to ART was assessed by a self-administered questionnaire. Medical costs incurred by the National Health Service were calculated retrospectively as from first ART and expressed in constant 1997 prices. RESULTS: Mean time on ART was 5.75 years (range 1.04–7.77); mean HIV-RNA and CD4 cells at baseline were 4.75 log10 copies/ml (range 1.3–6.6) and 370 μl (range 0–1309). Non-adherence was reported by 197 (36%) patients, who showed a higher number of new AIDS-defining events (p = 0.01), of detectable viremia episodes (p < 0.001), and of ART changes (p = 0.01). Overall medical costs and ART costs per year were on average €35,582 (range €35–€42,183) and €5373 (range €537–€35,582), respectively, and did not significantly differ between the two groups. Annual inpatient costs were higher in the non-adherent group (€432; 95% CI €256–€608) than in the adherent group (€198; 95% CI €127–€269; p < 0.005). On multivariate regression analysis, higher HIV-RNA, lower nadir and baseline CD4, fewer ART changes, and interaction between low adherence and number of therapy switches were independently associated with higher log-transformed ART costs per year. Older age, HCV co-infection, sub-optimal ART adherence, lower CD4 nadir, and higher baseline CD4 were independently associated with higher annual inpatient costs, based on multivariate tobit analysis. CONCLUSIONS: Non-adherence is common among HIV-positive patients and is associated with virological failure, disease progression, more frequent hospitalizations and treatment changes. Total and ART costs do not seem to be significantly affected by non-adherence, probably because of switches to simpler and less expensive treatment options, whereas inpatient costs are significantly increased by sub-optimal drug intake.

PIN17

COST-EFFECTIVENESS ANALYSIS OF ENFUVIRTIDE ADDED ALONE IN PATIENTS WITH H.I.V./AIDS

Serrano D1, Badia X2, Alvarez Sanz C3, Garcia Pulgar M4, Green J1
1Health Outcomes Research Europe Group, Barcelona, Cataluña, Spain; 2Roche Farma S.A, Madrid, Spain; 3Roche Farma S.A, Madrid, Spain; 4Hoffmann-La Roche Inc, Nutley, NJ, USA

OBJECTIVE: To analyse the efficiency of adding Enfuvirtide (ENF) to an Optimised Therapy (OT) in HIV patients who are...