and no. of present illnesses (OR 0.21 95% CI - 0.03-0.85) tended treatment with pirlimycin results in a higher profit margin of $7.12 and over one lactation period was $3051.72 (pirlimycin), $3054.66 (cephapirin), and $3031.24 (hetacillin). Over two lactation periods, the economic savings were $14.24 million (pirlimycin), $14.29 million (cephapirin), and $14.22 million (hetacillin). Over four lactation periods, the economic savings were $28.48 million (pirlimycin), $28.58 million (cephapirin), and $28.44 million (hetacillin). Increasing utilization of abacavir/lamivudine, from 5% to 60% over 5 years period resulted in an net cost saving during the initial startup phase of $2 437 millions “in 2010 dollars” over 5 years. The total direct costs decreased progressively at the end of the five-year period due to decreased acquisition drug costs. Sensitivity analyses demonstrated that the cost savings observed were maintained over a wide range of alternative values of the model parameters. Treatment patterns should be changed depending on the incidence and prevalence of neuropathy among HIV positive patients and subgroups. METHODS: A systematic search of the literature was performed using MEDLINE® and EMBASE®. The relevant literature was identified based on predefined criteria. Data were collected from cross-sectional, cohort and case-control studies. Results: Thirty-seven studies were included of which there were 23 cohort studies, 13 cross-sectional studies and 1 case-control study. The prevalence of neuropathy among HIV patients derived from 2% to 60%. Regarding the development of neuropathy among HIV positive patients, standardized by study duration, the rates per 100 person-years ranged from 0.7 to 39.7. Among older patients there is a greater risk of neuropathy. The same seems the case for patients with more severe disease. The association of HIV treatment with neuropathy is unclear. RESULTS: Current available studies providing information on the incidence and prevalence of neuropathy among HIV patients suggests a significant burden, but there is a great variation in results across studies. There is no clear explanation for the variation, but it underscores the fact that complexity of the disease, along with absence of standardized diagnostic criteria has considerably influenced the methodologies and outcomes of the studies. Standardization of an approach to HIV related neuropathy may enhance future research, allowing for a broader understanding of the condition and its associated burden.

EPIDEMIOLOGY OF METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS AT A MIDWESTERN ACADEMIC HEALTH CARE CENTER


OBJECTIVES: Methicillin-resistant Staphylococcus aureus (MRSA) is a gram-positive bacteria that are resistant to certain β-lactam antibiotics and are known as emerging cause for skin and soft tissue infection. To validate the CDC definition with antibiotic susceptibility definition for CA MRSA and HA MRSA using ciprofloxacin. Specimen source and the antibiotic susceptibility definition for CA MRSA and HA MRSA using ciprofloxacin and metronidazole. Specimen source (OR – 0.14 95% CI – 0.25-0.86) are the predictors for MRSA infection in the Midwest. CONCLUSIONS: MRSA infection is a health care-associated public health problem. Identification of risk factors at early stage can reduce the negative health outcomes, further transmissions, and also help in efficacious prevention of this disease. Treatment patterns should be changed depending on the susceptibility pattern of the organism. Research is needed to identify proper treatment regimens for the Midwestern population.

BUDGET IMPACT MODEL OF ABACAVIR/LAMIVUDINA FOR TREATMENT OF HIV INFECTED PATIENTS IN MEXICO

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OBJECTIVES: To calculate the impact of abacavir/lamivudina on the Mexican drug budget in 2010 and to forecast its impact over the following 5 years. METHODS: A budget impact model (BIM) of HIV infected patients was developed to evaluate the costs of abacavir/lamivudina versus emtricitabina/tenofovir and lamivudina/zidovudine from the Mexican Health Care perspective. The BIM was calculated by triangulating information derived from multiple Mexican data sources. The model is a simulation model with disease progression and costs. Abacavir/lamivudina treatment was compared to standard of care (tenofovir/emtricitabina) in adults with HIV in Mexico.

ECONOMIC EVALUATION OF DAPTOMYCIN COMPARE WITH STANDARD THERAPY IN THE TREATMENT OF STAPHYLOCOCCUS AUREUS BACTEREMIA WITH OR WITHOUT CM IN THE UNITED STATES: THE CASE OF PIRLIMYCIN

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OBJECTIVES: To design an economic cost comparison model of daptomycin, compared with standard therapy (based on vancomycin) in the treatment of bactere mia due to Staphylococcus aureus (both methicillin-resistant and non-resistant strains) in Colombia. METHODS: We designed a decision tree model (TreeAge software) based on one large randomized non-inferiority clinical trial (Fowler, N Engl Med, 2006), applying local (direct) costs obtained from a university hospital in Bogota. We used third party payer perspective, timeframe 6 weeks from the end of antibiotic therapy. We separately estimated antibiotic costs, hospitalization costs, ‘other’ hospital costs (which include non-antibiotic drugs, lab tests, medical imaging, emergency visits, etc.) and total costs. Exchange rate: 1:1934 Colombian pesos per US$ (as of July, 2010). RESULTS: When antibiotic costs are considered separately, these were higher in the daptomycin branch (US$382 vs US$336). This difference disappears when total costs are calculated (US$8937 vs US$9492). Hospitalization costs were US$1701 for daptomycin and US$1783 for standard therapy, while ‘other’ costs were US$3795 and US$4434, respectively. On the other hand, daptomycin therapy is associated with a lower incidence of acute renal failure (NNT = 17). CONCLUSIONS: If the two therapies compared have similar effectiveness, at similar costs, the discriminating factor in medical decision making should be safety. Choosing daptomycin instead of standard care (vancomycin) in adult patient with bacteremia due to S. aureus makes clinical and economic sense.