

Cost Effectiveness Analysis of Diuretics Therapy for Ascites in Hepatic Cirrhosis at Adi Husada Undaan Wetan Hospital in Surabaya

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Abstract

Background: Hepatic cirrhosis is a seriously chronic degenerative disease in which normal liver cells are damaged and are replaced by scar tissue. Ascites is the most frequent complication that happened in hepatic cirrhosis and need to be managed properly, especially in the cost effectiveness analysis. Cost Effectiveness Analysis is a form of Pharmacoeconomic study that evaluates and compares the cost and the clinical outcome of two or more treatments.

Objective: The purpose of this research is to compare the cost-effectiveness of 3 kinds of Ascites treatments: bolus intravenous Furosemid versus combination of oral Spironolakton and bolus intravenous Furosemid versus combination of oral Spironolakton, oral Furosemid and bolus intravenous Furosemid.

Method: Subjects (N = 29) were hepatic cirrhosis patients with ascites, and their age ranging from 34 to 85 years old. Data were collected from Adi Husada Undaan Wetan Hospital, Surabaya, from January 2010 to December 2011, using the retrospective approach. The sampling method used is purposive sampling. The measurement of cost was based on the cost of the drug used for the treatment and the effectiveness of the treatment is calculated based on the measurement of the increase of urine collection and the length of therapy. Data were analysed with Kruskal Wallis method and by calculating the value of Average Cost Effectiveness Ratio (ACER).

Result: The value of ACER for Furosemid bolus intravenous was IDR 139,800, for oral Spironolakton and Furosemid bolus intravenous was IDR 158,763 and for Spironolakton oral and Furosemid oral and Furosemid bolus intravenous was IDR 332,337.

Conclusion: This study showed that Ascites treatment with Furosemid bolus intravenous is most cost-effective. This result supports the preparation of the formulary with an alternative therapy which is more cost-effective.

Keywords : cost-effectiveness analysis, diuretic, cirrhosis hepatic, ascites.
