

Hospital Costs for Nasopharyngeal Carcinoma

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Abstract

Although both the incidence of nasopharyngeal carcinoma (NPC) and the average age of suburban Taiwanese are increasing, studies addressing the economic burden of NPC management in this population are lacking. Insight into factors that influence the cost of managing patients with NPC may result in more efficient use of resources. The purpose of this study was to determine the total medical expenditures for the management of NPC in Taiwanese and Taiwanese Aborigines. The charts and billing records of 42 Taiwanese or Taiwanese Aboriginal patients who were diagnosed with NPC and treated at the Taitung Mackay Memorial Hospital from September 1st 1998 to December 31st 2004 were reviewed. The influence of variables related to the management of NPC including number of outpatient clinic visits, length of hospitalization (days), and total medical charges was assessed during three different billing periods. Aboriginal patients had significantly higher total medical expenditures after diagnosis than did Taiwanese patients. Patients with larger tumor stages (T3 and T4) NPC were more likely to incur higher expenditures at 12 months as compared with patients at smaller tumor stages (T1 and T2). No significant differences in outpatient utilization, length of stay, or treatment outcome were found. Both groups had access to similar medical resources and treatment; however, aboriginal patients had significantly higher expenditures during any billing period than did Taiwanese patients. Taken together, there were no significant differences between Taiwanese and Aboriginal patients in terms of outpatient utilization or length of stay, suggesting that both groups had access to similar medical resources. Furthermore, there was no difference in treatment outcome between the two groups.

Key words: Aborigine, healthcare costs, nasopharyngeal cancer

Introduction

Nasopharyngeal carcinoma (NPC) is an Epstein-Barr virus-associated multifactorial genetic disease, and is the most common malignancy of the nasopharynx. NPC exhibits remarkable

racial and geographical variance (Chang & Adami, 2006) accounting for 2% of all head and neck squamous cell carcinomas in the United States (Chan et al., 2002). Between 1965 and 1999, the

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