UNIVERSITI TEKNOLOGI MARA

ENTERAL TUBE FEEDING: PREVALENCE AND NUTRITIONAL STATUS OF NEUROSURGICAL PATIENTS FROM HOSPITAL SUNGAI BULOH, MALAYSIA

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DECLARATION

We hereby declare that this submission thesis entitled Enteral Tube Feeding: Feeding Practices and Nutritional Status of Neurosurgical Patients from Hospital Sungai Buloh, Malaysia is our own work and the best of our knowledge. This is the result of our research except as cited in the references. The thesis has not been accepted for any other degree and is not concurrently submitted in the candidature from other degree.

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ABSTRACT

Enteral tube feeding (ETF) is a crucial step in order to improve the nutritional status of critically ill patients. Thus, feeding practices among health care practitioners would affect largely to the fate of the hospitalized patients. There were some of consequences if the ETF was not practiced accordingly such as malnutrition, increased length of stay and worsen complications. For that causes, this study would investigate the prevalence, feeding practices, anthropometry, biochemical profiles, energy adequacy and the length of stay among the neurosurgery patients at Hospital Sungai Buloh. The feeding practices include route of administration, mode of administration, types of formula and frequency of changing tube. Whereas, the anthropometry value would comprise height, weight, body mass index (BMI) triceps skinfold (TSF), mid-arm circumference (MAC) and mid arm muscle area (MAMA). This study used an experimental cross-sectional and descriptive study design which include filling the data collection form by using the information gathered from medical records, anthropometry measurement and the input/output chart written by nurses. The subjects were examined within 48 hours upon admitted to the ward (t0) as baseline and were followed up two weeks later (t1). The prevalence of patients admitted to neurosurgery ward with enteral tube feeding (ETF) was 44 patients (10.9%). In term of formula selection, 66% patients had received polymeric formula, 17% on specialized formula where the remaining 17% of the patients received combination of formulas. Mean BMI was decreased from baseline by 1.3 kg/m2. The difference of mean BMI between t0 and t1 was statistically significant, (p value = 0.01). While, the mean MAMA was decreased by 3.1 cm2. The difference of mean MAMA between t0 and t1 was also significant, (p value = 0.041). For the biochemical results, by using Pearson's Chi-Square test, only creatinine had shown a significant association with MAMA at t1, (p value = 0.005). By using the Pearson's Chi-Square test, energy adequacy had also shown a significant association of with MAMA at t1, (p value = 0.019). The mean length of stay for the discharged patients within the data collection period was 26 days for 13 patients. In conclusion, this study is important for development of suitable intervention for malnutrition among hospitalized patients. This would also increase the awareness of the health care providers about the importance of feeding practices of ETF.

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