

CASE STUDY: NUTRITION SUPPORT IN PATIENT WITH CEREBROVASCULAR ACCIDENT



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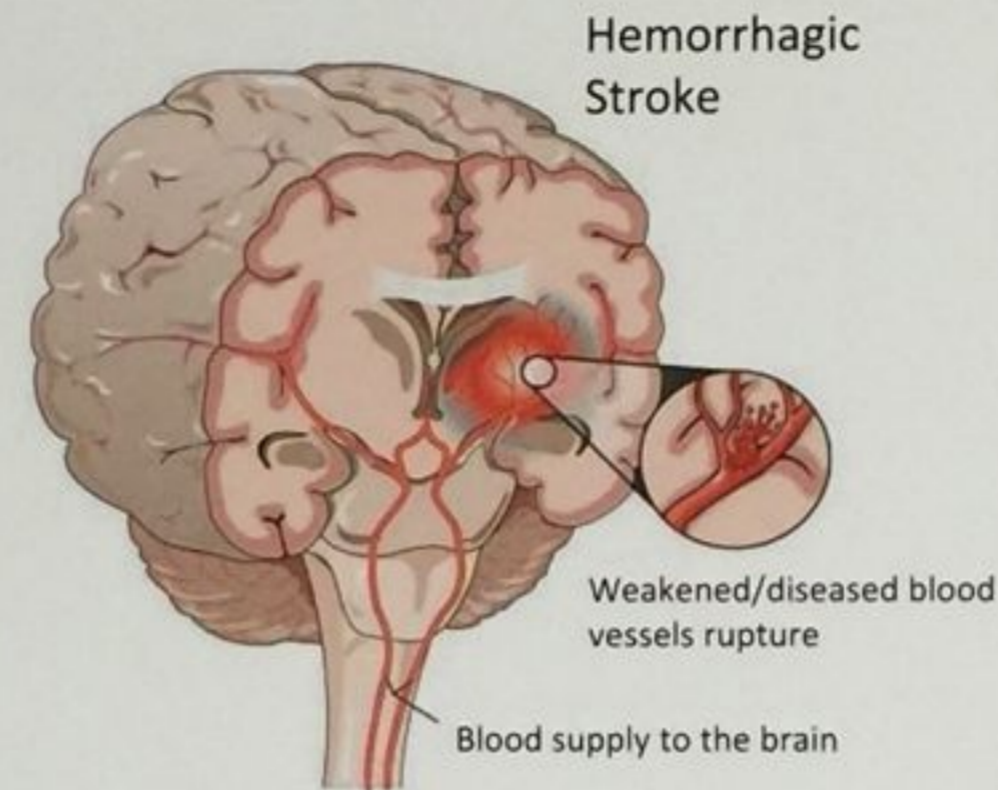
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Introduction

- According to the Centers for Disease Control and Prevention (CDC), currently more than 1/3 of adults in the United States are obese (2014).
- Obesity is known to increase the risk of developing certain health conditions, including stroke (CDC, 2011).
- Complications related to a stroke, such as a coma, dysphagia, or paralysis of a portion of the body, often require nutrition support.
- **Purpose:** Examine a clinical case utilizing current nutrition support guidelines for critically ill obese patients.
- **Case Study:** A critically ill 42 year-old person of Hispanic descent was admitted to the hospital with a cerebrovascular accident (stroke). The patient was found to be in acute respiratory failure, was transferred to the intensive care unit (ICU), intubated, and sedated. The patient's past medical history includes obesity and uncontrolled hypertension (high blood pressure). Nutrition support was required for administration of nutrients.

Literature Review

- Current nutrition support guidelines for obese adult patients recommend a trial of hypocaloric (lower-calorie) high protein feeding (Choban et al., 2013).
- The American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) recommendation for this guideline is weak and the evidence quality is low (Choban et al., 2013).
- There is a lack of research focusing on the obese patient population in the ICU setting.



Source: <http://www.danintranet.org/media/adimg/6047.jpg>



Source: <http://www.abbottnutrition.ca/content/dam/ani/abbottnutrition-ca/en/images/rlevity12Cal.jpg>

Source: http://www.nestlehealthscience.us/asset-library/PublishingImages/8.0_PRODUCTS_Local_Landing_Page/Product%20Images/Peptamen_Bariatric_202x202.png

Enteral Nutrition Support (Tube Feeding)

References

- Centers for Disease Control and Prevention. (2014). Overweight and obesity. Retrieved from <http://www.cdc.gov/obesity/data/adult.html>.
- Centers for Disease Control and Prevention. (2011). Obesity. Retrieved from <http://www.cdc.gov/chronicdisease/resources/publications/AAG/obesity.htm>.
- Choban, P., Dickerson, R., Malone, A., Worthington, P., Compher, C., & the American Society for Parenteral and Enteral Nutrition. (2013). A.S.P.E.N. clinical guidelines: Nutrition support of hospitalized adult patients with obesity. *Journal of Parenteral and Enteral Nutrition*, 37(6), 714-744.

Methodology

One initial assessment and four follow-up assessments of the patient were performed. Assessments include evaluating pertinent medical data, providing a nutrition diagnosis, recommending a nutrition intervention, and finally monitoring and re-evaluating the patient's progress towards their nutrition goals. Recommendations for nutrition support were made in accordance with A.S.P.E.N. guidelines to the doctor at each assessment.

Results

The patient remained on a hypocaloric feeding regimen throughout the duration of their nutrition support. The patient was able to transfer out of the ICU and his/her oral intake improved to greater than 75% of food provided 35 days after admission to the hospital. At the time of final assessment, the patient was awaiting discharge to a skilled nursing facility.

Summary and Conclusion

Based on the data collected in connection with the case study it appears that in this instance a hypocaloric, high protein diet was efficacious in the patient progressing to oral intake. This outcome supports and lends strength to the current A.S.P.E.N. recommendations.

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