

## Question 32 – Week of September 22

Aspiration in patients on enteral tube feeding:

- A. Is correlated more to aspiration of gastric contents than oropharyngeal secretions
- B. Is increased with use of oral medications like chlorhexidine mouthwash
- C. Correlates well to increasing residual volumes
- D. Is related to nursing care

**Answer: D**

Aspiration of contaminated oropharyngeal secretions is more likely to result in infection of the respiratory tree than is aspiration of contaminated gastric secretions. Use of mouthwash bid in critically ill subjects on tube feeding reduces aspiration pneumonia by 70%. Gastric residual volumes do not correlate well with gastric emptying or risk of aspiration. Risk of aspiration is inversely related to the ratio of number of nurses to subjects.

### References:

1. McClave SA, DeMeo MT, DeLegge MH, et al. North American Summit on Aspiration in the Critically Ill patient; Consensus statement. *J Parenter Enteral Nutr* 2002;26 (6Suppl):S80-5.
2. Lukan J, McClave SA, Lowen C, et al. Poor validity of residual volume as a marker for risk of aspiration. *Amer J Clin Nutr* 2002;75 (2): 417-418S.
3. Bonten MJ, Gaillard CA, van Tiel FH, et al. The stomach is not a source for colonization of the upper respiratory tract and pneumonia in ICU subjects. *Chest* 1994; 105(3):878-84.
4. Pingleton SK, Hinthorn DR, Liu C. Enteral nutrition in patients receiving mechanical ventilation. Multiple sources of tracheal colonization include the stomach. *Am J Med* 1986;80(5):827-32.
5. Torres A, el-Ebiary M, Gonzalez J, et al. Gastric and pharyngeal flora in nosocomial pneumonia acquired during mechanical ventilation. *Am REV Respir Dis* 1993; 148(2):352-7.