

Does it matter whether saliva is aspirated or penetrates only?

Anna Czernuszenko MD PhD, Centrum Kompleksowej Rehabilitacji, Konstancin-Jeziorna, Poland ,e-mail:anna.czernuszenko@gmail.com
Jacek Zaborski MD, PhD, Międzyleski Szpital Specjalistyczny, Warsaw, Poland

Aim

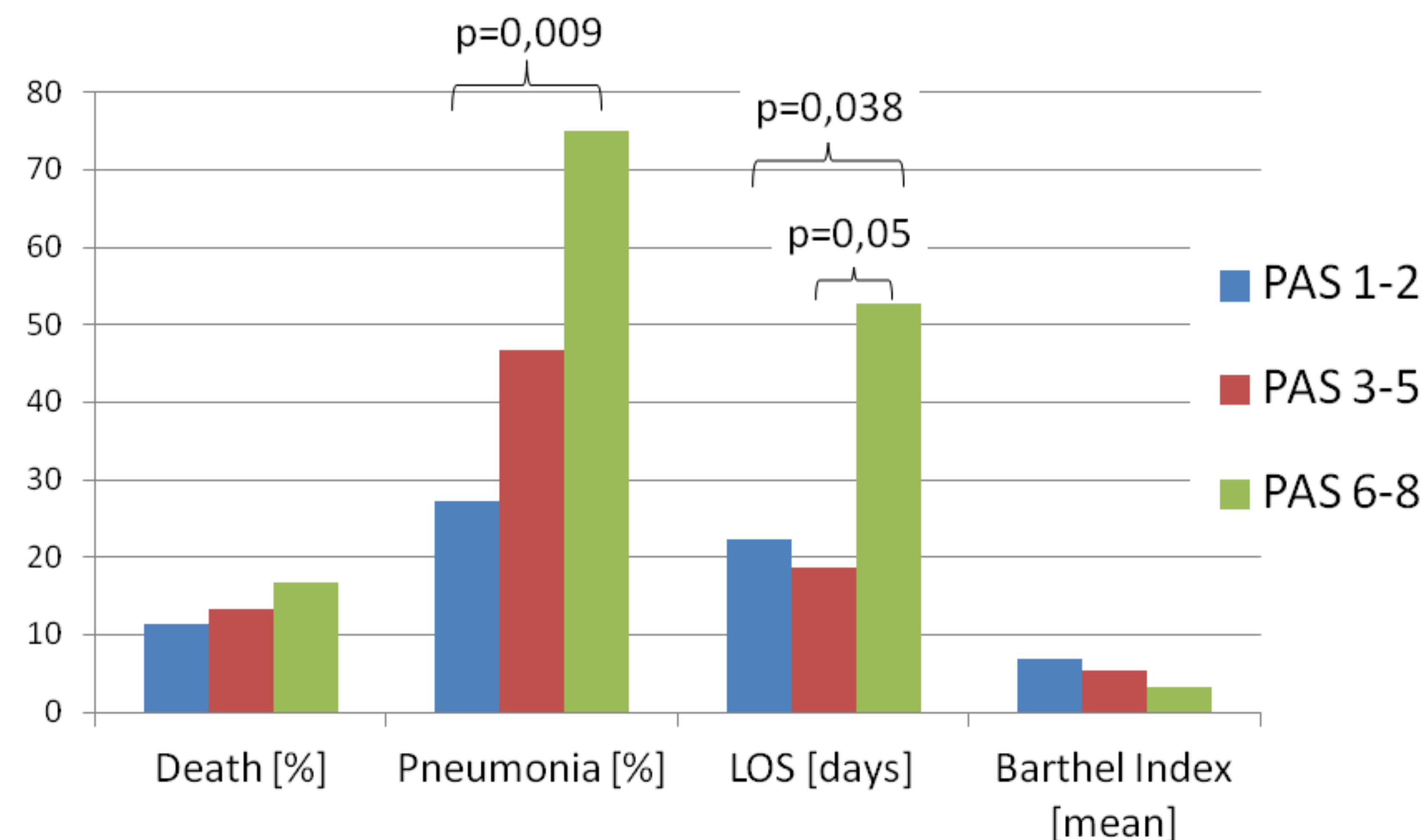
The study aimed to analyze death and pneumonia incidence and length of hospital stay (LOS) in relation to Penetration Aspiration Scale for saliva determined by fiberoptic endoscopic evaluation of swallowing (FEES) in a group of acute stroke patients.

Methods

We retrospectively analyzed incidence of inhospital death and pneumonia, LOS and functional status at discharge in a group of 71 acute stroke patients who underwent FEES and whose saliva aspiration status was determined according to the Penetration Aspiration Scale (PAS). PAS 1-2 was considered normal, PAS 3-5 indicated penetration and PAS 6-8 indicated aspiration.

Results

71 patients (35 F/37 M), mean NIHSS 12,4(SD 6,3) points, mean age 75,7(SD 12,9) years underwent FEES examination during acute stroke phase. 44 patients (62%) showed normal saliva management, 15 (21%) patients showed penetration of saliva and 12 (17%) patients showed aspiration of saliva in endoscopic swallowing examination.



Conclusions

Acute stroke patients aspirating saliva stay significantly longer in hospital than non-aspirating groups and are at significantly higher risk to develop pneumonia than patients with normal saliva management.

Aspirating patients were more likely to die, develop pneumonia and have more severe disability at discharge than patients with penetration of saliva but the differences did not meet statistical significance

References

Rosenbek JC, Robbins JA, Roecker EB, Coyle JL, Wood JL. A penetration-aspiration scale. *Dysphagia* 1996;11(2):93-8