The real costs of swallowing complaints in a public health system

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Objective: Difficulty swallowing may lead to aspiration pneumonia and death. In a hospital setting where patients are admitted for other causes, we hypothesised that the additional burden of a swallow problem would increase length of stay, rate of pneumonia, cost, readmissions and morbidity compared to those without dysphagia.

Method: Retrospective case control analysis of patients admitted to Waitematā DHB over 3 years with hip fracture. Two groups were identified and compared – those with a coded diagnosis of dysphagia (n=165) and an age- and gender-matched group without (n=2455). The number of in-patient days, cost per patient, diagnosis of pneumonia, 30-day readmission and mortality rates were compared.

Results: For those in the hip fracture with dysphagia group (HF+D) the mean age was 85 y compared to 78 y (p<0.05) and length of stay was 32 days, more than twice that of the hip fracture without dysphagia (HF-D) group (14 days)(p<0.05). Mortality within 30 days of admission was significantly different (18% vs 4%) but 30-day readmission rate was similar (8% vs 11%). Rate of aspiration pneumonia was 10 times greater in HF+D (6.7%) vs HF-D (0.7%). Average admission cost was $36,698NZD (HF+D) vs $22,028NZD (HF-D)(p<0.05).

Conclusion: Complaint of dysphagia, in addition to hip fracture, lengthens inpatient stays and cost per patient. It is associated with increased aspiration pneumonia and greater mortality. Dysphagia screening at admission to hospital allows early identification of swallow compromise and may prevent complications and reduce costs.

References: