UPPER OESOPHAGEAL TRANSIT AND SEVERITY OF OROPHARYNGEAL DYSPHAGIA

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Introduction
Upper oesophageal dysfunction is under-recognized in oropharyngeal dysphagia (OPD). A few small studies have confirmed this association (Micklefield G et al, Med Klin 1999, 94, 245-50). In the course of a project assessing upper oesophageal function in OPD, we wished to see whether upper oesophageal transit was related to the severity of OPD.

Methods
We retrospectively analysed data from 27 patients sequentially referred for videofluoroscopy where the technical quality allowed for further analysis. We measured the time taken for a semi-solid bolus to pass from the point of opening (POp) to the tail of the bolus reaching the upper border of C7. The distance from the POp to the upper border of C7 was measured in all patients thereby enabling us to determine velocity of bolus passage. We correlated transit times and velocity with the degree of oropharyngeal dysphagia assessed by the Dysphagia Outcomes Severity Scale (O’Neill et al, Dysphagia. 1999, 14, 139-45)

Results
The primary diagnoses were stroke (14), Parkinsonism (9), Friedrich’s ataxia, multiple sclerosis, COAD and cerebellar degeneration (1 each). The average velocity was 49 ± 21 mm/sec. There was no significant correlation between transit time and severity of OPD, for the group (σ = 0.03) or for stroke or Parkinsonism calculated separately.

Conclusions
Although abnormalities of upper oesophageal function have been described in OPD, its relationship to the severity and cause of swallow disorder is still unclear. This study shows that transit time alone is insufficient to characterize the nature of oesophageal dysfunction. However, the marked variability in transit time (21.5-90 mm/s) should encourage further investigation, including manometry, of the relationship between OPD and upper oesophageal function.