Pharmacological treatment of dysphagia in stroke

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Background: Drugs which affect smooth muscles may improve dysphagia in stroke patients but have not been formally evaluated.

Patients & Methods: A double-blind placebo controlled study was undertaken in 17 hospitalised patients with persistent swallowing problems 2 weeks after stroke. Patients were randomised to treatment with slow release nifedipine 30 mg orally (n=8) or placebo (n=9) following specialist swallowing assessment and videofluoroscopy. These were repeated after 4 weeks of treatment during which patients were monitored for compliance and adverse effects.

Results: Fourteen patients (active 6, placebo 8) completed the study. Two patients died (active 1, placebo 1) and 1 patient in the active group had to be withdrawn because of worsening of heart failure. Initial assessment showed improvement in the pharyngeal phase with delayed triggering of swallow, poor laryngeal elevation and vallecular and/or pyriform pooling in all patients. Silent aspiration was seen in 4 patients (active 2, placebo 2). Improvement in swallowing was seen in 8 patients (active 5, placebo 3) at the end of 4 weeks. There were significant changes in the pharyngeal transit time (mean -1335 sec, 95% C.I. -560,-110) and swallow delay (mean -1908 sec, 95% C.I. -3576,-0241) in the active group suggesting improvement in the initiation of pharyngeal contractions and reduction in the time taken for the bolus to transverse the pharynx. A similar change was not seen in the placebo group.

Conclusions: Pharmacological agents such as nifedipine may have a role in the management of stroke-related dysphagia and merit further investigation.

Audit management of stroke in a district general hospital

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We performed a retrospective study of one hundred stroke patients admitted to this department using the recommendations of the King's Fund Consensus Forum and the Royal College of Physician's report (J of RCP of London, 1990, 24:15-17). We used the stroke audit package produced by the Royal College of Physicians. We found records in many areas to be deficient. The performance on various aspects was as follows: the source of history was documented only in 34% of cases. Records of risk factors were below 50% in general but hyperlipidaemia was documented in none of the cases. Pre stroke functions were recorded at 55%. Although pulse, blood pressure and heart sounds were recorded in nearly 100% of cases, however, records of neckbruit peripheral pulses and fundoscopy were below 38%. Swallowing assessment was recorded only in 5% cases on admission and CT brain was performed in 46% cases. The immediate hydration plan and incontinence problems were documented only in 14% and 15% cases respectively. In secondary prevention there was only 10% score on the use of Warfarin and 56% on the use of Aspirin. Documentation of risk factors is important so that a clear advice can be given on secondary prevention. Our knowledge has improved in managing stroke patients with hypertension, atrial fibrillation and carotid artery stenosis etc (European Atrial Fibrillation Trial, Lancet, 1993, 342; 1255-62), (Anti platelet Trialists Collaboration, BMJ 1994; 308, 81-106) and (MRC European Carotid Surgery Trial 1991 Lancet; 337, 1235-43). Early assessment of swallowing and incontinence problems is essential to prevent future complications. CT brain scan is important for correct diagnosis and management. We recommend that such audits should be conducted widely and to improve the teaching of medical students, junior doctors and other professionals, dealing with stroke patients in addition to encouraging research.