treatment of choice, but eventual surgical treatment of the pharyngeal pouch would have been recommended because of the continuing risk of aspiration and pouch enlargement.

Most cases of dysphagia after hemispheric stroke resolve within two weeks of onset.³ However, physicians should be aware of non-neurogenic causes of dysphagia in their patients with stroke and should investigate dysphagia when it is out of proportion to the other neurological deficits.

J.R.F. Gladman
R.M. Kupfer
P.J. Bradley

*Department of Health Care of the Elderly,
University Hospital,
Nottingham NG7 2UH, UK.*

References

1. Bowdler, D.A. Pharyngeal pouches. In: Kerr, A.G. (ed.) *Scott-Brown's Otolaryngology*, 5th ed. Butterworth, London, 1987, pp. 264–282.
2. Park, R.H.R., Allison, M.C., Lang, J. *et al.* Randomised comparison of percutaneous endoscopic gastrostomy and nasogastric tube feeding in patients with persisting neurological dysphagia. *Br Med J* 1992, **304**: 1406–1409.
3. Gordon, C., Langton Hewer, R. & Wade, D.T. Dysphagia in acute stroke. *Br Med J* 1987, **2**: 411–414.

Spontaneous haemorrhage into a pituitary tumour after streptokinase therapy

Sir,

A 47 year old bank clerk awoke one morning with severe chest pain radiating to both arms and was found to have suffered an acute anterior non-transmural myocardial infarction. He was treated with 1.5 million units of streptokinase intravenously over 1 hour together with 5,000 units of calcium heparin subcutaneously and 300 mg aspirin by mouth. Two hours after finishing the streptokinase infusion, he complained of sudden severe headache, diplopia and blurred vision. On examination, he was fully conscious with right third and sixth nerve palsies, left temporal scotoma and bilateral limited upward gaze. Thrombin time: 29 seconds (normal range 7–12); fibrinogen concentration: 0.5 g/l (normal range 2–4 g/l); prothrombin time: 19 seconds (normal range 10–14); partial thromboplastin time: 47 seconds (normal range 35–45).

An urgent cranial computed tomographic (CT) scan revealed a large enhancing pituitary mass with suprasellar extension. A fluid level, with high density posteriorly, was present within the central portion of the tumour indicating recent haemorrhage. Serum prolactin: 213,000 mU/l rising to 304,500 mU/l after thyrotrophin releasing hormone stimulation; basal and stimulated serum cortisol and thyrotrophin were normal.

Bromocriptine (1.25 mg daily) was commenced and over the following 3 days his headache disappeared. The cranial nerve palsies recovered after one month. Six months later, he was well and his prolactin level was now 84 mU/l. The previously demonstrated fluid levels were no longer visible on CT scan and the pituitary tumour was much reduced in size.

Bleeding complications in the large trials of streptokinase in acute myocardial infarction were infrequent but patient selection was strict with only 14–35% of patients eligible for treatment.^{1,2} As the use of thrombolytic treatment becomes more widespread, the incidence of haemorrhagic complications may be expected to rise. Haemorrhage may be more likely into a vascular tumour and has been reported in association with a renal carcinoma.³

Bleeding into a pituitary tumour has not been previously described after streptokinase but has been reported after anticoagulant treatment.⁴ Early diagnosis is essential because of the high mortality of untreated cases.⁵ Reversal of antithrombotic therapy has been recommended when bleeding problems arise but could aggravate the underlying thrombotic episode for which they were prescribed. When pituitary apoplexy arises, we urge rapid referral to a suitable centre where full evaluation and monitoring can be performed.

S.L. Hyer
S.C. Soo
W. Taylor
S.S. Nussner
*Department of Medicine,
St George's Hospital Medical School,
Cranmer Terrace,
London SW17 0RE
and ¹Department of Neuroradiology,
Atkinson Morley Hospital,
Copse Hill,
London SW20 0NE, UK.*

References

1. Gruppo Italiano per lo Studio della Streptokinasi Nell'infarto Miocardico (GISSI). Effectiveness of intravenous thrombolytic treatment in acute myocardial infarction. *Lancet* 1986, **i**: 397–402.
2. ISIS-2 (Second International Study of Infarct Survival) Collaborative Group. Randomised trial of intravenous streptokinase, oral aspirin, both, or neither among 17,187 cases of suspected acute myocardial infarction: ISIS-2. *Lancet* 1988, **ii**: 349–360.
3. Johnston, R.T., Jameson, J.S. & Macpherson, D.S. Retroperitoneal haemorrhage from a renal carcinoma in association with streptokinase therapy. *Postgrad Med J* 1991, **67**: 1029–1030.
4. Nourizadeh, A.R. & Pitts, F.W. Haemorrhage into pituitary adenoma during anticoagulant therapy. *JAMA* 1965, **193**: 623–625.
5. Cardoso, E. & Peterson, E. Pituitary apoplexy: a review. *Neurosurgery* 1984, **14**: 363–373.