reboxetine, these clinical and biochemical effects may be encountered in some patients and need to be recognized.

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Early neurological deterioration in acute stroke

Sir,

The recent article by Kwan and Hand highlighted the increasingly recognized fact that early neurological deterioration (progressing stroke) is a common and important complication in acute stroke, which affects long-term prognosis. The authors correctly point out that there is no accepted international definition of early neurological deterioration, but the proposal from the European Progressive Stroke Study (EPSS) appears to be more reliable than alternative definitions.1

We studied 873 consecutive patients admitted to Glasgow Royal Infirmary over a 2-year period.2 They had baseline assessments of stroke characteristics and stroke severity. Early neurological deterioration was assessed at day three, using a definition very similar to that of the EPSS. Our results were very similar to those of Kwan and Hand, confirming that patients with early neurological deterioration were more likely to have a poor outcome.

We subsequently carried out a logistic regression analysis incorporating the following characteristics: age category (by decade), gender, pre-stroke dependency, history of atrial fibrillation (AF) or diabetes mellitus, severe stroke (Total or Partial Anterior Circulation Stroke), cerebral haemorrhage, adverse physiological complications in the first three days (pyrexia, hypoxia, hypoglycaemia or dehydration) and stage of service development (before or after the opening of the acute stroke unit). The analysis indicated the following were potential independent predictors of the development of early neurological deterioration: age (OR 1.18 per decade, p = 0.04), pre-stroke dependency (OR 1.45, p = 0.065), severe stroke (OR 1.86, p = 0.0007), cerebral haemorrhage (OR 2.57, p = 0.0005), adverse physiological complications (OR 1.49, p = 0.022) and stroke-unit care (OR 0.72, p = 0.072). Gender and a history of AF or diabetes were not independent factors. While our results confirm the observations of Kwan and Hand in a larger dataset, they also provide some hope that improving the quality of care in stroke units may contribute to reducing this serious complication.

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