A CONTROLLED INTERVENTION TRIAL TO IMPROVE APPROPRIATE STEROID PRESCRIBING

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Introduction
A multi-disciplinary team in collaboration with the Royal College of Physicians Research Unit has derived methodology to assess the appropriateness of steroid and β₂ agonist co-prescription for elderly medical inpatients (Oborne et al, Br J Clin Pharmac In press). The effect of two methods of external intervention on appropriateness of prescribing was investigated.

Methods
16 units in Wales and England were randomised to receive multi-disciplinary verbal, bulletin or control intervention. Data were collected from drug charts and clinical notes of medical inpatients aged >65 years before (B) and 4-6 weeks after (A) intervention. An evidence based algorithm was used to assess appropriateness of prescribing (Asthma: British Thoracic Society 1993, Thorax 48, S1-24; COAD: Callahan et al 1991, Ann Intern Med 114: 216-23).

Results
Clinical data were collected for 220/1279 patients prescribed β₂ agonist in B and 237/1331 in A. In B 65% patients received steroids but significantly fewer met criteria for appropriate steroid prescription (49%, p<0.01). In A 60% received steroids again fewer were appropriate to receive steroids (44%, p<0.01). Use of β₂ agonist alone was largely appropriate (B:73/77, 95%; A:92/94, 98%). Appropriateness of steroid prescribing was not improved after feedback:

<table>
<thead>
<tr>
<th>Intervention</th>
<th>B</th>
<th>A</th>
<th>p</th>
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<tbody>
<tr>
<td>Verbal</td>
<td>48*</td>
<td>77%</td>
<td>78%</td>
</tr>
<tr>
<td>Bulletin</td>
<td>47*</td>
<td>65%</td>
<td>66%</td>
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| Control        | 47* | 77% | 71% | NS  | * Number of patients prescribed steroids

Conclusion
Multidisciplinary intervention by an external team did not improve appropriateness of prescribing in airways obstruction. This differs from the limited published data and our own results with benzodiazepine prescribing and may reflect better baseline prescribing.

REDUCED DIURNAL BLOOD PRESSURE VARIATION IN HAEMORRHAGIC STROKE

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Introduction
Diurnal BP variability following stroke may be of prognostic significance. Although diurnal BP changes in non-haemorrhagic (NH) stroke have been studied, 24-h BP changes following primary intracerebral haemorrhage (PIH) have not been investigated.

Methods
Consecutive stroke patients who were admitted within 36-h of stroke onset underwent 24-h non-invasive BP monitoring within 2 days of hospitalisation. Strokes were classified as PIH or NH based on head CT scan findings. Patients not CT scanned were excluded.

Results
Patients age and sex was similar in both PIH (n=24) and NH (n=107) groups (age: 72 ± 11 v 70 ± 11), but BP was significantly higher in the PIH v NH group (day SBP: 166±23 v 143±21* mmHg, DBP: 97±14 v 82±12* mmHg, night SBP: 166±25 v 137±23* mmHg, DBP: 96±14 v 76±13* mmHg, respectively, * p<0.05). Diurnal SBP and DBP variability was also reduced in the PIH v NH group whether expressed in absolute terms or as percentage change, (day-night SBP: 0.8±13.1 v 6.3±10.1* mmHg and 0.4±8.1% v 4.4±6.9%, day-night DBP: 1.4±8.6 v 5.6±6.2* mmHg and 1.1±9.5 v 6.8±7.6%*, respectively). There was no difference between groups in the diurnal heart rate change.

Conclusion
Acutely following stroke BP is substantially higher in patients with haemorrhagic stroke, probably as a result of previous hypertension. Reasons for the absence of the usual diurnal BP difference following haemorrhagic stroke is unclear, it may be the result of stroke severity resulting in increased intracranial pressure and stimulation of the Cushings reflex, changes in autonomic nervous and baroreceptor control of BP or such patients may have an absent nocturnal BP fall prior to the stroke.