Is it safe to deprescribe blood pressure lowering medications in older adults?

Results from the OPTiMISE trial

Summary

This trial suggests that antihypertensive medication reduction can be achieved without substantial change in blood pressure control in some older, multi-morbid patients with hypertension.

Population

Patients aged 80+, taking 2 or more antihypertensives with well controlled systolic blood pressure (150mmHg or less).

569 Participants
48.5% Female
51.5% Male
98.4% Multimorbidity
85 Years old
4 Medications prescribed

Findings

Primary outcome: Is medication reduction similar to usual care with regard to short-term systolic blood pressure control (<150 mmHg)?

<table>
<thead>
<tr>
<th>Control</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>% with controlled systolic blood pressure</td>
<td>87.7%</td>
</tr>
</tbody>
</table>

Confidence Interval

Pre-specified minimum limit for non-inferiority (0.90)
0.90

Adjusted Relative Risk (0.98)
0.95

1

Observed non-inferiority margin* (0.92)

Result: Yes – primary outcome met.

Systolic blood pressure (mmHg) 130.8 133.7
Number of antihypertensives 2.6 1.8

Randomisation

Comparison

Continue all medication
Continue as is

Medication reduction
Reintroduce medication

OPTiMISE Deprescribing algorithm

People aged 80 or over, taking 2 or more antihypertensives
Remove one antihypertensive
Check blood pressure at 4 weeks
≤150 mmHg & no adverse event
>150 mmHg or adverse event
Continue as is
Reintroduce medication
Monitor for 12 weeks

Caveat:
The long-term impacts of medication reduction remain unknown, and were not examined by this study.

Healthcare professionals should exercise caution when considering whether or not to deprescribe blood pressure medication.

Contact:
Co-chief investigator,
Dr James Sheppard
james.sheppard@phc.ox.ac.uk

Reference: