Letter to the Editors

ASCOT – old or new drugs for blood pressure?

James Ritter & John Warren¹

GKT School of Biomedical Science, St Thomas' Hospital, and ¹25 South Audley Street, London, UK

Before we can conclude that the impressive data from the recent ASCOT trial support the implication of the accompanying editorial, that new antihypertensives are superior to older drugs [1], some provisos should be considered.

Of the older drugs, atenolol certainly has limitations; it has not been distinguished from placebo in terms of morbidity and mortality for the treatment of uncomplicated hypertension [2, 3]. However, thiazide or thiazide-like diuretics remain a preferred first-line treatment choice [4]. They have a similar benefit to other antihypertensives, but with a lower incidence of heart failure. Bendroflumethiazide was an appropriate active comparator, but using a dose of 1.25 mg day⁻¹ in a proportion of patients may be subtherapeutic. Although the dose of bendroflumethiazide of 10 mg daily used in the MRC hypertension trial [5] is now considered too high, a dose of 1.25 mg day⁻¹ may be too low.

Amlodipine was shown to be effective in the Antihypertensive and Lipid Lowering Treatment to Prevent Heart Attack Trial (ALLHAT), but the incidence of heart failure, at approximately 10%, was higher than with the thiazide [4]. The failure to show an increase in heart failure in ASCOT might be explained by the coprescription of an angiotensin converting enzyme inhibitor (ACEI) in about half of the patients receiving amlodipine. Claims for amlodipine based on ASCOT may trade on results that depend on ACE inhibition with perindopril. This is particularly important, as the ACEI was given to those whose blood pressure was not controlled and these are the subpopulation most likely to contribute to the endpoints. The trial does not remove the concerns that have been raised about calcium antagonists in cardiovascular prevention [6].

There seems to be solid evidence for recommending thiazides, in the correct dosage, as the first-line treat-

ment for hypertension. Adding an ACEI remains a logical second step for those not controlled, particularly given the opposing effects of ACEI and thiazides on plasma potassium ion concentration. Such treatment could particularly benefit the appreciable proportion of hypertensive patients who progress to heart failure.

Of the four drugs tested in the trial, one old, a thiazide, and one new, an ACEI, may be better first-line options for hypertension, rather than a β -adrenoceptor blocker or a calcium channel antagonist, on the available clinical trial data.

Conflict of interest

J.W. works in medicines regulation, but the views expressed are the author's personal ones and are not those of any agency.

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