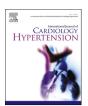
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Interamerican Society of Cardiology (IASC) position statement: Chlorthalidone vs. thiazide-type diuretics *

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ABSTRACT

The Interamerican Society of Cardiology (IASC) Position Statement for hypertension management in Latin America is a practical and useful review of five different hypertension guidelines. Though, thiazide diuretics have been recommended as firstline option, the position statement needs to highlight differences within the thiazide class. Chlorthalidone is structurally and pharmacokinetically distinct from thiazide-type iuretics like hydrochlorothiazide with a longer half-life and 24-h anti-hypertensive effect. It has been shown to reduce cardiovascular morbidity and mortality in several landmark studies evaluating anti-hypertensives.

We appreciate the efforts by Wyss and colleagues to analyze five hypertension guidelines and derive practical recommendations for hypertension management in Latin America. Though, the authors have recommended thiazides as first-line option, they have not differentiated within the thiazide class.

A meta-analysis involving 112, 113 hypertensives showed that thiazide-like diuretics cause significantly greater reduction in cardiac events than thiazide-type diuretics [1]. American and Canadian guidelines reviewed by the authors too, recommend preferring thiazide-like diuretics like chlorthalidone (CTD) on the basis of long duration of action and proven efficacy in landmark trials. CTD is structurally and pharmacokinetically distinct from thiazide-type diuretics like hydrochlorothiazide (HCTZ) with a longer half-life (40-60 h vs. 3.2-13.1 h), explaining the potent 24-h anti-hypertensive effect. In a double-blind randomised trial, CTD significantly reduced 24-h ambulatory, day-time as well as night-time BP. However, no significant 24-h BP reduction was seen with HCTZ, which merely converted sustained hypertension into masked hypertension [2]. Meta-analyses and observational comparisons also have suggested that CTD is superior to HCTZ in preventing CV events [3,4]. Major National Institutes of Health-funded studies evaluating anti-hypertensives have preferred CTD as the thiazide-diuretic; and CTD has been repeatedly shown to reduce CV events and death, equally or better than other anti-hypertensives at clinically used doses. In contrast, HCTZ at usual prescribed doses (12.5-25 mg/day) has no published evidence of reducing CV events and has been called a "paltry" antihypertensive [5].

Thus, we suggest that IASC should guide clinicians to use the evidence-based diuretic CTD which has been unequivocally shown to prevent hypertension-related morbidity and mortality.

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^{*} We declare that this manuscript hasn't received prior publication and isn't under consideration for publication elsewhere. All authors have seen and approved the final version of the manuscript being submitted.

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