

Tip 2. Chlorthalidone (May 2009)

This is the subject of the commonest query I have from GP's and from pharmacists.

It is significantly underutilised drug in New Zealand where the most popular thiazides at hydrochlorothiazide (as in *Inhibace Plus* and *Accuretic*) and bendrofluazide.

It comes only in the 25mg tablet and the usual dose is 12.5mg (tablet can be halved) or 25mg.

I am strongly of the opinion that it is the diuretic of choice in hypertension and has probably always been so, for the following reasons

- More potent
- Very long half-life and better control of BP over the whole 24 hour period (also means that missing the odd dose does not affect BP control significantly)^{1,2,4}
- The thiazide used in many of the pivotal hypertension studies showing outcome benefit with thiazides (the benefits from these studies have been extrapolated to other thiazides, not necessarily with good evidence)^{5,6}
- It is effective down to lower GFR's than other thiazides (important in patients with chronic kidney disease)³
- In my (and others) experience, the most effective single manoeuvre in the management of resistant hypertension patients on multidrug regimens is changing the existing thiazide to chlorthalidone

1. Comparative Antihypertensive Effects of Hydrochlorothiazide and Chlorthalidone on Ambulatory and Office Blood Pressure. Ernst ME et al. *Hypertension* 2006; 47:352-358
2. Chlorthalidone: Has It Always Been the best Thiazide-Type Diuretic (Editorial Commentary). Sica DA. *Hypertension* 2006; 47:321-322
3. Cardiovascular outcomes in high-risk hypertensive patients stratified by baseline glomerular filtration rate. Rahman M et al. *Ann Intern Med* 2006;144:172-80
4. Chlorthalidone vs Other Low-Dose Diuretics (letter). Choi KL. *JAMA* 2004;292:1816-7
5. Diuretic vs Alpha Blocker as First-Step Antihypertensive Therapy. Final results from the Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial (ALLHAT). ALLHAT Collaborative Research Group. *Hypertension* 2003;42:239-246
6. Prevention of stroke by antihypertensive drug treatment in older persons with isolated systolic hypertension. Final results of the Systolic Hypertension in The Elderly Program (SHEP). SHEP cooperative research group. *JAMA* 1991;265:3255-64