

String of PEARLS

Practical Evidence About Real Life Situations

about eczema and asthma

PEARLS are succinct summaries of Cochrane Systematic Reviews for primary care practitioners—developed by Prof. Brian McAvoy for the Cochrane Primary Care Field (www.cochraneprietarycare.org), New Zealand Branch of the Australasian Cochrane Centre at the Department of General Practice and Primary Health Care, University of Auckland (www.auckland.ac.nz/uoa), funded by the New Zealand Guidelines Group (www.nzgg.org.nz) and published in NZ Doctor (www.nzdoctor.co.nz).

- Topical pimecrolimus is less effective for treating eczema than moderate and potent corticosteroids and tacrolimus
- There is no clear evidence of benefit for antimicrobial interventions in atopic eczema
- Probiotics are not effective for eczema
- Regular inhaled corticosteroids reduces exercise-induced asthma
- House dust mite control measures do not reduce asthma symptoms
- Homemade spacers are effective in delivering bronchodilator therapy to children with asthma
- Culture-specific programmes for minority groups with asthma improve some outcomes

DISCLAIMER: PEARLS are for educational use only and are not meant to guide clinical activity, nor are they a clinical guideline.

The image contains four logos:

- Cochrane Primary Health Care Field:** A circular logo with a stylized 'C' and 'H'.
- The University of Auckland New Zealand:** A crest logo with the text 'THE UNIVERSITY OF AUCKLAND NEW ZEALAND' and 'Te Whare Wānanga o Tāmaki Makaurau' below it.
- New Zealand Guidelines Group:** A logo with a map of New Zealand and the text 'New Zealand GUIDELINES GROUP Te Rōpū Rarangi Tohutohu Promoting Effective Health and Disability Services'.
- NZ Doctor:** A logo with the text 'NEW ZEALAND Doctor'.

Spironolactone (when all else fails) in hypertension

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THE PROBLEM: Your patient is on four antihypertensives and their blood pressure is still 180/120.

CLINICAL BOTTOM LINE: Spironolactone has a place in hypertension, but as a last option before referral to secondary care (assuming underlying causes have been ruled out). I personally have found it much better than doxazosin in lowering blood pressure in those who are really difficult to manage. It is not a drug that patients like and is associated with gastrointestinal symptoms (sometimes serious),¹ gynecomastia in men and hyperkalemia and death.² The Cochrane review found in a meta-analysis of five crossover studies a reduction in SBP of 20.09 mmHg (95%CI:16.58–23.06, $p < 0.00001$) and a 6.75 mmHg (95%CI:4.8–8.69, $p < 0.00001$).³ There is no cardiovascular outcome evidence for treating hypertension with spironolactone, although it has been shown to be effective (in one study at least) to improve mortality in those with severe heart failure.⁴ Aldosterone blockade has a place in congestive heart failure.⁵ The review mentions there may be a dose response up to 50 mg per day, but I have found 25 mg to be fine in most cases.

Spironolactone in hypertension

	Success	Evidence	Harms
Spironolactone in lowering blood pressure	Effective in lowering BP by 20 mmHg of systolic BP and 6.75 mmHg diastolic BP	Cochrane review ³	Hyperkalemia and death ² Gynecomastia GI symptoms ¹

References

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