String of **PEARLS**

Practical Evidence About Real Life Situations

PEARLS are succinct summaries of Cochrane Systematic Reviews for primary care practitioners—developed by Prof. Brian McAvoy for the Cochrane Primary Care Field (www.cochraneprimarycare.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.).

- Thiazides best first choice for hypertension
- Beta-blockers not the best first-line treatment for hypertension
- ACE inhibitors have a modest blood pressure–lowering effect
- Renin inhibitors are effective in lowering blood pressure
- Little evidence of benefit from relaxation therapies for hypertension
- Aiming for blood pressure targets lower than 140/90 mmHg may not be of benefit
- Weight-reducing drugs may be beneficial in hypertensive patients
- Organised systems of regular follow-up and review can improve blood pressure control

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

COCHRANE PRIMARY HEALTH CARE FIELD

THE UNIVERSITY OF AUCKLAND NEW ZEALAND
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Promoting Effective Health and Disability Services

Doctor

NSAIDs for dysmenorrhoea

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THE PROBLEM: Dysmenorrhoea is a common gynaecological problem consisting of painful cramps accompanying menstruation which, in the absence of any underlying abnormality, is known as primary dysmenorrhoea.

THE SITUATION: Research has shown that women with dysmenorrhoea have high levels of prostaglandins, hormones known to cause cramping abdominal pain. Nonsteroidal anti-inflammatory drugs (NSAIDs) are drugs which act by blocking prostaglandin production. Pain is usually centred in the suprapubic area, but may radiate to the back of the legs or lower back, and may be accompanied by other symptoms such as nausea, diarrhoea, headache and lightheadedness. The prevalence estimates vary widely. It was reported by 72% of Australian women of reproductive age in a recent nationally-representative sample and caused severe pain in 15% of cases. Other representative samples report rates ranging from 17% to 81%. In addition to the distress associated with dysmenorrhoea, surveys have shown significant socioeconomic repercussions: over 35% of female high school students report missing school due to menstrual pain and 15% of working.

CLINICAL BOTTOM LINE: All NSAIDs are effective for dysmenorrhoea and there does not seem to be one better than others. It was not possible to report a numbers needed to treat from the review, but in one of the typical papers it was about five. The review did not suggest when to start taking the medication, but some of the studies advised to start taking the medication at the onset of first cramps.

NSAIDs for dysmenorrhoea

	Success	Evidence	Harms
NSAIDs for dysmenorrhoea	NNT of about 5	Cochrane review[1]	Risk of renal injury and gastric bleeding

NNT = numbers needed to treat for one person to get an improvement

References

1. Marjoribanks J, Proctor M, Farquhar C, Derks RS. Nonsteroidal anti-inflammatory drugs for dysmenorrhoea. Cochrane Database of Systematic Reviews 2010, Issue 1. Art. No: CD001751. DOI: 10.1002/14651858.CD001751.pub2.

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