PEARLS

Practical Evidence About Real Life Situations

En d'infections répétées des voies urinaires de jeunes patientes, on peut recommander la canneberge (cranberry) sous forme de jus ou de capsules. Cela pourrait éventuellement permettre de diminuer l'adhérence d'E. coli à l'épithélium urinaire. *Bernhard Rindlisbacher*

Cranberries can prevent recurrent urinary tract infections in women
PEARLS No. 131, June 2008, written by Brian R McAvoy

Clinical question: How effective are cranberry products in preventing urinary tract infections (UTIs) in susceptible populations?

Bottom line: There was some evidence that cranberries (juice or capsules) may decrease the number of symptomatic UTIs over a 12-month period, particularly for women with recurrent UTIs (NNT*7). The evidence for elderly men and women was less clear, and there was evidence cranberry products were not effective in people who needed either intermittent or indwelling catheters.

Caveat: Many people in the trials stopped drinking the juice, suggesting it may not be a popular intervention. It is not clear how long cranberry juice needs to be taken to be effective or what the required dose might be.

Context: No definite mechanism of action has been established for cranberries in the prevention or treatment of UTI. However, the main suggestion is cranberries prevent bacteria, particularly Escherichia coli, from adhering to uroepithelial cells lining the bladder. Without adhesion, E. coli cannot infect the mucosal surface of the urinary tract.
(1. Searchfield GD. NZ Fam Phys. 2003;30:345–9)

Cochrane Systematic Review: Jepson RG and Craig JC. Cranberries for preventing urinary tract infections. Cochrane Reviews 2008, Issue 1. Article No. CD001321. DOI: 10.1002/14651858.CD001321.pub4.
This review contains 10 trials involving 1049 participants.

* NNT = number needed to treat to benefit 1 individual.

Il n'existe apparemment que deux études acceptées pour la revue par le groupe Cochrane avec 148 patients en tout. Les données semblent cependant montrer que la pose de diabolos chez les enfants de moins de 3 ans ayant des otites moyennes aiguës répétitives en réduit la fréquence de 70% dans les 6 mois suivants. *Bernhard Rindlisbacher*

Grommets effective for recurrent acute otitis media
PEARLS No. 137, January 2009, written by Brian R McAvoy

Clinical question: How effective are grommets for recurrent acute otitis media (AOM) in children?

Bottom line: Grommets have a significant role in maintaining a "disease-free" state in the first 6 months after insertion, in children aged 3 years or younger. In one study, grommets reduced the number of episodes of acute otitis media by an average of 1.5 episodes per child (a reduction of approximately 70%), and significantly increased the proportion of children with no episodes of AOM. The other study reviewed also found a higher proportion of patients in the grommet group had no episodes of AOM in the 6 months after intervention, but the difference was not statistically significant. The effect size was small in terms of total number of episodes of recurrent AOM but in both studies more than 50% of children were AOM-free, while only a handful were rendered AOM-free in the antibiotic arm.

Caveat: This review involved only 2 small studies. Further research is required to investigate the effect of grommets beyond 6 months. Clinicians should take into account an individual patient's circumstances, the possible adverse effects of grommet insertion and the potential complications of AOM before surgery is undertaken.

Context: AOM is one of the most common infectious diseases in childhood. Recurrent AOM is defined for the purposes of this review as either 3 or more acute infections of the middle ear cleft in a 6-month period, or at least 4 episodes in a year. Strategies for managing AOM include the assessment and modification of risk factors where possible, repeated courses of antibiotics for each new infection, antibiotic prophylaxis and the insertion of grommets.

Cochrane Systematic Review: McDonald S et al. Grommets (ventilation tubes) for recurrent acute otitis media in children. Cochrane Reviews 2008, Issue 4. Article No. CD004741. DOI: 10.1002/14651858.CD004741. pub2.
This review contains 2 studies involving 148 participants.

PEARLS

PEARLS are succinct summaries of Cochrane Systematic Reviews for primary care practitioners. They are developed by the Cochrane Primary Care Field and funded by the New Zealand Guidelines Group.

PEARLS provide guidance on whether a treatment is effective or ineffective. PEARLS are prepared as an educational resource and do not replace clinician judgement in the management of individual cases.

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