

About this Newsletter

This monthly newsletter is coordinated and published by ISIS. The newsletter is designed to provide you with up-to-date information related to internationally educated dentists. Your contribution is valuable. Please feel free to share and recommend new topics, inform us of resources, events or programs valuable to IEDs.

Contents	February 2012
What's in your water.....	Page 1
The effects of antiepileptic.....	Page 2
Implantable electronic devices.....	Page 2-3
Courses	Page 3
Useful links	Page 3

What's in Your Water Can Improve Your Oral Health

November 30, 2011 (Ottawa, ON) — The Canadian Dental Hygienists Association (CDHA) wants Canadians to know that fluoridation of community water supplies plays an important role in oral health.

The public debate on fluoridation of water has increased in recent months but water fluoridation has been safely used since the 1940s. The Office of the Chief Dental Officer indicates there is widespread usage of water fluoridation across Canada with an overall Canadian average of 45%. CDHA recognizes that Canadians may be confused about the benefits and safety of fluoride and has launched a Q and A on community water fluoridation to help educate the public.

"It's understandable for people to wonder what the fluoride debate means for them and their families in practical terms," says Mandy Hayre, Educator-Director on the CDHA board of directors. "The CDHA urges Canadians to get informed. Find out about water fluoridation in your community and consult your dental hygiene professional about use of oral health products containing fluoride."

The CDHA supports water fluoridation because of its proven benefits in the prevention of dental caries

(cavities); one of the few conditions that affects Canadians of all ages. Fluoride protects tooth surfaces from acid attack and promotes repair of early cavities. If fluoridated water is consumed in childhood, teeth become even more resistant to decay.

Fluoridation of community water supplies has been called one of the top ten most significant breakthroughs in public health of the 20th century. It is a safe, effective and inexpensive way of protecting the oral health of all Canadians and is supported by Health Canada.

"Fluoride definitely has a place in oral health care, but is just one component of a comprehensive approach to promoting good oral health," says Ms. Hayre. The CDHA advises Canadians to take a number of steps to keep their teeth and gums healthy: brush teeth daily; clean between teeth with floss or an interdental brush; rinse with over-the-counter mouthwash; make healthy food choices; and regularly visit a dental hygienist.

For more information on protecting oral health, visit: www.cdha.ca/OralCareCentre

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The Effects of Antiepileptic Drugs on Oral Health

Long-term use of phenytoin (PHT) causes gingival hyperplasia; however, little is known about the oral side effects of other antiepileptic drugs (AEDs). Through a systematic review of the literature, we explored the effects of AEDs on the oral health of patients with epilepsy.

Gingival hyperplasia was very common in patients taking PHT (16%–94% of patients). Alveolar bone loss occurred in patients taking carbamazepine or PHT. Patients taking valproate, carbamazepine or phenobarbital also had gingival hyperplasia. We found no published studies of newer-generation AEDs.

Although several studies examined the effects of PHT on oral health, none have studied those of the newer generation of AEDs. Studies exploring oral side effects of AEDs are needed.

The main treatment options for patients suffering from epilepsy, a chronic disorder of the brain that affects 40–70 of every 100 000 people in the developed world,¹ are antiepileptic drugs (AEDs), surgical treatment or vagus

nerve stimulation. The treatment option chosen depends on the type and severity of the disorder. More than 15 AEDs have been approved for the treatment of epilepsy in North America and Europe.² Patients may have to try several medications before they can control their seizures: ≤ 50%, achieve control after trying 1 medication; another 10% achieve control after 2, and a further 5% after 3 or 4 medications.³ If medications cannot control the seizures, surgical treatments are considered.³ However, despite successful surgical treatment, most patients remain on AEDs.

Read more: <http://www.jcda.ca/article/b140>



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Can Dent Assoc 2011; 77:b140

Does ultrasonic dental equipment affect cardiovascular implantable

Ultrasonic dental devices have been in use since the 1950s and are important in the armamentarium of oral health care providers. Ultrasonic scaling is as effective as hand instrumentation for the removal of calculus and is widely used. Ultrasonic cleaning baths reduce cross-contamination of dental instruments and prostheses. Electronic apex locators and pulp testers have been important in the advancement of clinical endodontics. Other dental devices that emit electromagnetic energy include certain types of dental hand pieces, amalgamators and electro-surgery units.

The 2 methods of producing ultrasound are based on the magnetostriction and piezoelectric principles.

Magnetostriction, a property of ferromagnetic materials, converts electromagnetic energy into mechanical energy; vibrations and heat are produced during this process. The piezoelectric principle is based on the deformation of crystals when an electrical charge is applied; this deformation is converted into mechanical oscillations without producing heat.

Implantable Electronic Devices

Cardiovascular implantable electronic devices, chiefly implantable cardiac pacemakers and implantable cardioverter-defibrillators, are used to treat a variety of electrical cardiac defects, including bradyarrhythmia,

ventricular tachycardia and fibrillation; they are also used in patients with complete heart block. It is estimated that 3 million people globally, including more than 500 000 individuals in North America, have implantable cardiac pacemakers. The use of such devices has significantly reduced mortality rates among patients with a history of life-threatening ventricular arrhythmia, and they are becoming more commonplace in the general population.

Read more: <http://www.jcda.ca/article/b113>

jcda.ca

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J Can Dent Assoc 2011;77:b113

Useful Dental Links

- [Journal of the American Dental Association](#)
- [British Dental Journal](#)

Thank you for taking time out of your hectic work and study schedule to read our newsletter. We want to improve our newsletter with your suggestions, comments, recommendations, and contributions with your news. We look forward to hearing from you.

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COURSES

DENTAL-CLINICAL SKILLS REVIEW

2012: ONLINE REGISTRATION AVAILABLE

- 1) Clinical Skills & Judgment - Program (9 days) **\$4995**
- 2) Clinical Judgment - Review only (2 days) **\$1200**
- 3) Clinical Skills - Review only (7 days) **\$4500**

NEW PROGRAM - CLINICAL JUDGMENT REVIEW

Clinical Judgment Review

- Toronto - Friday, February 24 and Saturday, February 25
- London - Friday, March 9—Saturday, March 17, and Friday May 25 - Saturday, June 2

<http://www.schulich.uwo.ca/dentistry/CDE>