

INTERFERENCIAS DURANTE EL USO DE APARATOS ELECTRONICOS EN LA CONSULTA DENTAL

Interference of cardiac pacemaker and implantable cardioverter-defibrillator activity during electronic dental device use. JADA 2010;141:521.

- Scaler-Cavitron: (Cavitron Select SPS, Dentsply)
 - Interferencia a 15 cm de MP monocameral
 - Interferencia 17-23 cm de MP bicameral.
 - Interferencia a 7 cm de DAI.
- Cubeta de limpieza ultrasónica (L&R Manufacturing, Kerarney, NJ)
 - Interferencia a 9-12 cm de MP monocameral.
 - Interferencia a 15-23 cm de MP bicameral.
- Luz polimerizadora de composite (SmartLite Q2 Densply Caulk)
 - Interferencia a 3 cm de MP monocameral.
 - Interferencia a 7-10 cm de MP bicameral.
 - Interferencia a 2-3 cm de DAI.

CONCLUSIONES

- Amalgamador, Pulpómetro eléctrico, Cepillo dental eléctrico, Electrobisturí, Torno manual de alta y baja velocidad no causan ningún tipo de interferencia.
- Precaución en el uso de Cavitron, Cubeta de limpieza y luz polimerizadora tanto en pacientes como trabajadores portadores de MP o DAI.
- Precaución en el uso de electrobisturí.
- Considerar el uso de aparatos manuales en pacientes portadores de MP-DAI.
 - Retirar de las áreas clínicas las cubetas ultrasónicas de limpieza.

Medical and Dental Procedures

Many medical procedures will not affect your heart device; however, certain medical procedures can result in serious injury, damage to your heart device, or device malfunction. Before undergoing any medical procedure, it is recommended that you advise your treating doctor or dentist that you have an implanted heart device and consult with your heart doctor to evaluate any possible associated risk.

Acceptable	Acceptable with Precautions	Not Recommended
<p>If the item is used as intended and in good working condition, there is no known risk:</p> <ul style="list-style-type: none"> • Acupuncture – no electrical stimulus • Bone Density Test (x-ray) • Bone Density Ultrasound – on heel or hand • Capsule Endoscopy • Dental Drills • Dental Ultrasonic Scaler/Cleaner • Diagnostic Ultrasound (Echocardiogram) • Diagnostic x-rays (fluoroscopy) • Electrocardiogram (ECG/EKG) • Hearing Aid (in or behind ear) • Heart Rate Monitor • Laser Surgery • Mammography • Positron Emission Tomography (PET Scan) • PH Capsules • Sleep Apnea Machine 	<p>Inform your treating physician that you have a heart device implanted and/or consult with your heart doctor/clinic.</p> <p>Medical procedures that require some precautions:</p> <ul style="list-style-type: none"> • Ablation (specifically, microwave ablation and radiofrequency ablation) • Acupuncture with electrical stimulus • Computerized axial tomography (CT or CAT) scan • Electrolysis • Electrosurgery and other procedures that use an electric probe to control bleeding, cut tissue, or remove tissue • External defibrillation, AED, and elective cardioversion • Hyperbaric Oxygen Therapy (HBOT) • Lithotripsy • Radiotherapy (including high-energy radiation therapy) • Stereotaxis • Therapeutic ultrasound • Transcutaneous Electrical Nerve Stimulation (TENS), including neuro muscular electrical stimulation (NMES) • Transmitting loop for digital hearing aid • Transurethral needle ablation (Medtronic TUNA® therapy) • Muscle Stimulators and other devices sending current into your body 	<ul style="list-style-type: none"> • Diathermy (high frequency, short wave, and microwave) • MRI (if device not MR-Conditional. Present your heart device identification card to your physician to determine if your heart device is MR-Conditional, which may allow access to an MRI scan – see page 7)

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Does ultrasonic dental equipment affect cardiovascular implantable electronic devices?

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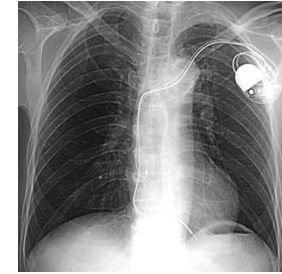
Based on the current evidence, it is recommended that use of magnetostrictive ultrasonic equipment be avoided on or near individuals with implantable cardiac pacemakers or cardioverter-defibrillators.⁵ At this time, piezoelectric equipment appears to have no substantial effects on these devices.

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DISPOSITIVOS DE CONTROL DEL RITMO

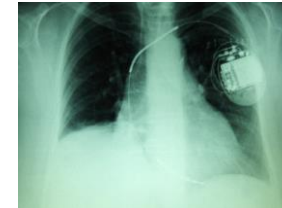
MARCAPASOS:

- Ante un campo magnético el marcapasos se convierte en sordo y se anulan los circuitos de detección.



DESFIBRILADOR AUTOMÁTICO:

- Ante un campo magnético no se afecta la función marcapasos, pero se anula totalmente la función antitaquicardia.



PRECAUCIÓN

- Antes de utilizar un imán debe conocer el dispositivo que porta su paciente, monitorizar su ritmo cardiaco y si es o no marcapasos-dependiente.