

Technical Informational Piece

Date: September 21, 2009
To: All Field Personnel
From: Biotronik Technical Services
Re: Transcutaneous Electrical Nerve Stimulation (TENS) and Biotronik Pulse Generators

Transcutaneous electrical nerve stimulation (TENS) may interfere with pulse generator function. TENS introduces electrical currents into the body which may be seen by the device and could cause pacemaker inhibition or noise mode. TENS therapy must be approved by the patient's physician. BIOTRONIK recommends that the physician monitor the patient's cardiac activity during TENS at the highest output to determine if it affects the pacemaker behavior. If TENS therapy is approved for use by the patient's physician, BIOTRONIK recommends that the following measures are taken to reduce the possibility of interference:

- Place the TENS electrodes as close to each other as possible.
- Place the TENS electrodes as far from the pulse generator/lead system as possible

Please contact Technical Services for additional questions: 1-800-284-6689