

# Rhythms of Life

Restoring Rhythms, Renewing Lives

Spring 1999

## "Robo Cop"

The Los Angeles Police Department (LAPD) now has their very own "Robo Cop." David Rosenberg, 38, received this nickname from his co-workers because he has a pacemaker.

Six years ago, David developed symptoms during the night that woke him from a deep sleep. The symptoms, which occurred about four times per year, included a rapid heart rate, excessive sweating, and lightheadedness. Being young and in top physical condition, these symptoms puzzled David.

David's doctors began investigating possible heart rhythm problems. They detected two accessory electrical pathways in David's heart which caused electrical impulses to travel very fast resulting in a very rapid heart rate. Doctors determined an ablation procedure was necessary to disrupt the fast rhythm. Ablation procedures use various methods to disrupt (destroy) parts of the abnormal electrical pathways that are causing the abnormal heart rhythm, returning the heart to a more normal rhythm.

After the ablation, David's heart rate became too slow (45 beats per minute) and he needed a pacemaker. In David's case, the electrical impulses that travel from the heart's upper chamber (atrium) to the heart's lower chamber (ventricle) to make the heart beat were blocked, causing the slow heart rate.

He received a dual chamber, rate-responsive pacemaker. His device

David Rosenberg of California



uses a combination of sensors that detects changes in physical activity and respiration. This technology allows the pacemaker to adjust David's heart rate automatically during rest, physical activities or exertional exercise.

David initially expressed concern about having a pacemaker implanted. "I thought my life was over. Young people don't get pacemakers. What about my career with the police force?" Today, David continues on full duty status and is assigned to Internal Affairs with the LAPD. His weekly workout routine includes running on the treadmill and playing racquetball. David finds sharing his story with others, especially the "under 50 crowd," is important and he doesn't mind being called "Robo Cop." ❏

## Helping Others

"I have always had an irregular heart rate. Doctors determined I needed a pacemaker because my heart rate included 2-3 second pauses, and I could get short of breath just unloading groceries from the car," says Raedell Simon. The pacemaker detects (senses) Raedell's irregular heart rhythm and provides the timed electrical impulses (paces) needed to maintain a proper rhythm. But Raedell, age 83, finds little time to think about the pacemaker she had implanted last summer. She is too busy thinking about others.

Raedell belongs to (and helped start) a group called the "Maydayers" that raises funds for Healing the Children. "Maybe I need a pacemaker, but there are children around the world with very catastrophic medical needs," explains Raedell. "These children may be born with no arms or legs and need people and money to help them get their medical treatment. Helping these children is so rewarding, and nothing tops getting a hug from them."

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### Has Your Address, Phone #, or Doctor Changed?

Medical device manufacturers need your assistance to insure their records are accurate and current. If you live in the U.S.A., it is important that you notify your device manufacturer when your address, phone # or doctor changes. Your I.D. card will have the name and phone number of your device manufacturer. For Medtronic devices, our Patient Services phone number is 800-551-5544.

## Freedom to Roam

Emily Warren was born by emergency delivery. “Her heart was extremely sick. She required numerous resuscitations, and many drugs to keep her alive,” explains Emily’s mother, Catherine. Within days, Emily’s doctors diagnosed her condition as Long QT syndrome (LQTS).

“I decided the only way to cope would be to educate myself about Long QT and rely on my faith in God,” Catherine recalls. She contacted the Sudden Arrhythmia Death Syndromes Foundation (SADS) and learned that inherited LQTS is a genetic or acquired abnormality of the heart’s electrical system. It results in pauses (a prolonged QT) during the heart beat (not the same as pauses between heart beats). This electrical defect can bring on a dangerously fast heart rhythm.

Emily’s condition required medications and a pacemaker. In addition, Emily needed an external defibrillator with her at all times in

case she experienced a fast heart rhythm. Going for a walk meant taking along Emily’s wagon so the portable defibrillator could be nearby if needed.

As the pacemaker neared the end of its battery life, Catherine and Howard (Emily’s father) began extensive research to understand all of Emily’s options. An ICD (implantable cardioverter defibrillator) could now be a possibility because Emily was larger and older (4 years old). An ICD detects an abnormally fast heart rate and automatically delivers therapies to restore a normal rhythm. ICDs can also be programmed to detect and treat a slow heart rate and function as a pacemaker. Therefore, Emily’s medical needs could be met with only one device.

Catherine explains how they used the internet to gather data about the various ICDs. They read each manufacturer’s web site paying close attention to the benefits of each ICD. They looked for an ICD with a small size, pacemaker features, and long battery life.

*Emily Warren of Florida*



“We are so pleased,” says Catherine. “Even though Emily is small, you can barely tell she has a device implanted. And more importantly, its small size lessens any problems for her to sit or stand. She has adjusted so well. The implanted defibrillator allows Emily to have more freedom to be her bubbly, energetic self.” Emily attends pre-school, and enjoys watching her sister Margaret’s soccer games and sister Alison’s tennis matches. “And now, going for a walk is simple: Emily just holds our hands or rides along on her tricycle.” ❏

## 3 Years Later

One morning Joe Haughey was walking into work when he suddenly felt ill and collapsed in the parking lot. Fellow employees immediately responded with CPR and resuscitated him.

“Prior to that incident I had a clean bill of health,” says Joe. So it came as a surprise to Joe, when at age 46, he left the hospital 10 days later with an implanted defibrillator. The defibrillator’s function is to detect and treat a dangerously fast, unstable and irregular heart rate that originates in the lower chamber (ventricle) of the heart.

After the implant of the defibrillator, Joe admits he and his wife, Bonnie, had many anxieties. “We did not know what to expect next,” he says. Bonnie confirms the many questions they had. “We read every piece of literature, and we asked a lot of questions,” explains Bonnie. “It took time. We found the more we learned and talked about it, the better we felt.”

It has been almost three years since the implant. Joe says he is happy to report his heart rate has maintained a normal rhythm on its own and he has not required any shocks from the device. “The defibrillator gives me an added security measure but it really

*Joe Haughey and wife Bonnie of Pennsylvania*

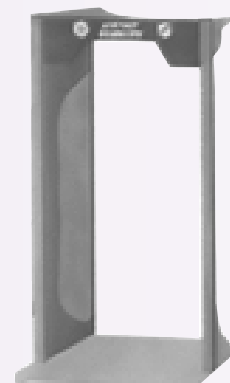


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# FREQUENTLY ASKED QUESTIONS

## *Can I go through store anti-theft detectors and airport security systems?*

Yes. **Anti-theft detectors** used in stores and libraries operate on the principle of generating electromagnetic interference (EMI) fields that can “sense” embedded “tags” on the merchandise being protected. It may be possible, under unique circumstances, for these same interference fields to affect the operation of an implanted pacemaker or defibrillator. Significant effects from the interference are unlikely to occur if you pass “normally” through the detectors because the interference ends as soon as you walk through (or move away) from the anti-theft equipment. It is recommended that you:



- 1 become aware of anti-theft detectors,
- 2 walk through at a “normal” walking speed, and
- 3 do not linger close to the detection system equipment.

If you are near an anti-theft system and you feel symptoms, move promptly away from the equipment. Your Medtronic pacemaker or defibrillator will resume its previous state of operation when you move away from the source of interference.

**Airport security systems** are less likely to affect the operation of a pacemaker or defibrillator. However, airport security systems (both the walk-through archway and the hand-held wands) are metal detectors. Therefore, when you walk through the security archway at a normal walking speed, it may **detect the metal of your pacemaker or defibrillator**. Because the metal detector cannot determine whether or not you are carrying a dangerous metal object (such as a weapon), you may be asked to undergo additional search methods. If so, it is helpful to show your device identification card. Then, if you have a pacemaker, ask to be cleared with a hand-held screening wand held away from the pacemaker, or request a hand search. If you have a defibrillator, ask for *only* a hand search because a screening wand has the potential to cause a defibrillation therapy.

## *Can I use a cellular phone?*

Yes. You may already have a pacemaker or defibrillator that is engineered with the newest technology to specifically resist today's cellular phone interference. Even if it does not, or if you are uncertain, simply follow the standard use guidelines that have been developed by the industry.

- ✓ *Maintain a distance of 6 inches (15 centimeters) between a hand-held cellular phone and the implanted device. For portable and mobile cellular phones (phones transmitting above 3 watts), keep a distance of 12 inches (30 centimeters) between the antenna and the implanted device.*
- ✓ *Hold the phone to the ear opposite the side of the implanted device.*
- ✓ *Do not carry the phone in a breast pocket or on a belt over or within 6 inches (15 centimeters) of the implanted device.*



## *Is my device Year 2000 compliant?*

Yes. The year 2000 (Y2K) is approaching and much attention is being given to preparing computers for the transition to the next century. This matter is extremely important to computer applications that involve date transactions. However, pacemakers and defibrillators **are not affected**. Your pacemaker or defibrillator is continuously sensing (monitoring) your heart's own rhythm to determine if therapy is needed, and does not deliver therapy on the basis of any calendar date. **This is a Year 2000 Readiness Disclosure.**



### 3 Years Later continued

has not changed my life,” explains Joe. He continues to work full time and teach piano. He is also the organist and choir director for two churches. Joe’s interest in music goes back many years. For 20 years Joe

played the keyboard for a traveling band and was a studio arranger for many famous recording artists.

That is not to say that Joe’s life hasn’t had some changes. He is now the

proud father of an 18-month-old son, Michael, and cherishes their games of catch and walks to the park. And more changes are coming soon because Bonnie is due with twins! ▼

### Helping Others continued

Raedell is also credited with starting Palmdale’s Senior Day at the Mall. Twice a year, Raedell organizes bus transportation to the mall, breakfast, and merchant discounts for 200-400 seniors. Even seniors who do not usually get out and spend a day at a shopping mall because they have wheelchairs, canes, or walkers, find it hard to turn down this event. “We want them all to feel like King or Queen for the Day,” Raedell says. “We decorate the mall, book the school band, and notify the TV stations. It is really quite a day.”



To stay fit, Raedell says she maintains a healthy diet and a regular exercise program. Every morning at 6:00 a.m. Raedell meets 50-75 other seniors at the neighborhood mall to walk. They each keep records of the miles they walk and, at last count, Raedell had over 1500 miles clocked!

Raedell believes people need to LIVE more and not take life so seriously—which is why she likes cruising around in her sports car. And may be why, when asked what she plans next, she quickly replies, “I want to learn to tap dance.” ▼

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