Hospital liaison nurse develops an effective post cardiac device implant discharge planning

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doi: 10.12681/healthresj.36457

To cite this article:

HOSPITAL LIAISON NURSE DEVELOPS AN EFFECTIVE POST CARDIAC DEVICE IMPLANT DISCHARGE PLANNING

The implantation of a cardiac device in patients with arrhythmias and in patients with heart failure is associated with relevant survival benefit. An artificial cardiac pacemaker is a medical device that generates electrical pulses delivered by electrodes to one or more of the chambers of the heart, the upper atria or lower ventricles. An implantable cardioverter-defibrillator (ICD) is a medical device that has the ability to perform defibrillation and/or anti-tachycardia pacing. The likelihood of having a pacemaker implanted increases dramatically with age. In fact, over 70% of all pacemakers are implanted in patients over the age of 65. With an aging population and increasing life expectancy, one can only expect the number of these devices to grow exponentially in the future. According to a report published by Fortune Business Insights, titled “Cardiac Pacemakers: Global Market Analysis, Insights, and Forecast, 2019-2026,” the market was valued at US$4,064.9 million in 2018. Fortune Business Insights has predicted that the market will reach US$5,131.9 million by the end of 2026.

The implantation of the device is often accompanied by severe psychological distress. Furthermore, there are many factors that may cause ICDs and pacemakers to provide insufficient or incorrect therapy or present some complications in the time following implantation. Patient-centered care and constructed educational programs can decrease malfunction and complications and help patient regain a high quality of life.

Patients often report inadequate education after their hospital discharge, a fact that may affect their quality of life (psychological and social consequences of living with a cardiac device). The cornerstone of developing a post cardiac device implant discharge planning is patient understanding of safety provided by the device. The next step is liaison nurse to coordinate the discharge of the patient, to follow the care provided, and to transfer information to the primary care professionals or to the patient’s family. Liaison nurse is responsible for the patients receive planned care according to their needs and for answering all possible questions that may occur, such as: What is this device? How is it positioned? What care is needed on the part of the patient? When should patient contact the cardiologist? Which are the fundamental principles of device follow up?

Discharge instructions cover key areas such as:

**Incision site care**
- Instructions for ongoing wound care (advice patient to keep incision clean and dry for at least 10 days, stitches removal timetable)
- Instructions concerning the incision (advice patient to check body temperature and signs of infection such as redness, swelling, drainage, or warmth until wound healing)

**Activity guidelines**
- Instructions for activities such as: driving, returning to work, physical activity, sexual activity, strenuous activities
(lifting, pushing and pulling), travelling

**Information about the device and the potential impact from household appliances and electric devices with strong electromagnetic field**

- Instructions for using or avoid using household devices (microwave oven, electric blankets), mobile phone and iPods, industrial welders and electrical generators, chainsaws

**Strong magnetic fields**

- Instructions for walking through the airport screening wand

**Information about the device**

- Device ID CARD supply from the device company
- Information related to Magnetic Resonance Imaging (MRI) compatibility of the device
- Information related to device battery life

**Medical and dental procedures**

- Instructions for procedures such as, MRI, diagnostics x-rays, diagnostic ultrasound, mammograms, computed tomography (CT) scans, dental procedures, transcutaneous electrical nerve stimulation therapy

**Follow up care**

- Information related to remote monitoring
- Regular post-operative appointment timetable with the doctor (as advised)
- Advice for periodic checkups (every 6 months) to check the function and battery life of the device

**In case of emergency**

- Information related to medical team availability for ongoing support

A post cardiac device implant discharge planning improves the ability of patients to care for themselves post-discharge, thus reduces morbidity and mortality. Moreover, it reduces patients’ anxiety and depression and help them comply with scheduled patient follow-up visits.

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