Psychological Characters and Exercise in Patients with AICD

- Assist. Prof. Visal Kantaratanakul, MD
- Director, Samitivej Srinakarin
- Head, Cardiac Rehabilitation Unit, Samitivej
- ravkn@yahoo.com

Please close your eye and think

What do you think if you sit in a car that hit/accident badly ????

Then next several minutes that car got fire and you struck inside

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Psychological components

- Patient
  – Depression
  – Anxiety
- Relatives
  – Anxiety
  – Fear

Facts

- There are both sides of studies: there are difference/ no difference in psychologcal variables between patient with/without AICD
- More spouse anxiety if there is/are shock storm (s)
- Main problems with type D personality (distressed)

หน่วยโรคหัวใจ ภาควิชาอายุรศาสตร์ คณะแพทยศาสตร์ โรงพยาบาลรามาธิบดี
มหาวิทยาลัยมหิดล ถนนพระราม 6   กทม. 10400
โทร. (622) 2011612, 2011617, 2011627   โทรสาร (622)2011668

Division of Cardiology, Faculty of Medicine, Ramathibodi Hospital Mahidol University,
Rama VI Road, Bangkok 10400 Tel.(662) 2011612, 2011617, 2011627
Fax. (662)2011668

Patient:

Age: 55 yr   Sex: Male   Date: August 3, 2010
Weight   Height   BSA

Automated implantation cardiovertor defibrillator
Procedure: AICD implantation
Indication: S/P AVR with poor LV with VT
Consent: obtained with signature
Pre-Medication: Cefazolin
Anesthesia: 2% Lidocaine 20 ml at Lt. Infraclavicular area, IV fentanyl& diazepam
Portal of entry & Technique: Left axillary vein
Intravascular sheath: 9 Fr
Problem or incident during the procedure: none

Operative Note:
After an informed consent was obtained the patient was brought to the cardiac cath laboratory in a post-absorptive state. The patient was connected to continuous vital sign monitors and external pacing/defibrillation patches. The patient was sedated with IV midazolam and fentanyl. The patient was prepped and draped in sterile fashion. Lidocaine was used as a local anesthetic. Intravenous contrast was used to locate the left axillary vein. Incision was made along vein path. The medial axillary vein was entered under fluoroscopic guidance. Using a peel away sheath technique the RV lead was placed in the RV apex with adequate parameters. The lead was anchored in placed with a non-absorbable suture. The leads were then connected to the generator. The assembly was then placed in the pocket. DFT was done using ULV method. The generator was anchored to the prepectoral fascia with a non-absorbable suture. The pocket was then inspected for bleeding. Hemostasis was ensured. The pocket was closed in layers. The patient tolerated the procedure well, and transferred from the lab in stable condition.

Defibrillation Efficacy Testing:
Using ULV method. VF was induced at 400/31o ms train CL with 1.1 J shock, DC 11 J was failed to terminated VF. Then 21 J DC was successfully defibrillated VF. Therefore DFT was 21 J.

Technical data
Right Ventricular lead: Guidant 0158serial #235252, DOI August 3, 2010
Generator   : Guidant Teligen 100 F102 serial #018667, DOI August 3, 2010

1. Threshold   1.5V@0.4ms
2. R wave sense   8.8 mV
3. P/S Impedance   550 ohms   / shocking impedance 40 ohms

When a cardiac event happens what do people experience?

ACUTE PHASE (Hospital)

Initial Euphoria – I've survived

Increased anxiety and depression

Misconceptions

"You will be alright if you are careful"

Interpreted
?

"If I am not careful I will die"

"You were lucky this time"

Interpreted
?

"I won't be lucky next time"

"It is only a warning"

Interpreted
?

"Something terrible is yet to come"

POOR DISCHARGE
- Depressed
- Anxious
- Misattribution of somatic symptoms
- Physical Deconditioned – fear avoidance
- Over/under involvement spouse/partners
- Sexual difficulties
- Time off work / lifestyle changes

Psychological Interventions can produce
46% reduction non-fatal cardiac events
41% reduction in mortality
2 years follow up (Ref: *Linden et al 1996*)

Exercise based interventions may have
Positive effect of patients – physical ability to exercise
Improve some physiological measures of cardiac disease
                but do not impact on
Blood lipids
Morbidity
Overall mortality
Insufficient evidence re psychological and social outcomes

Exercise in Patient with AICD

- Important thing is to clarify state of psychological problems and fix them as much as you could