The Impact of Combined Resynchronization and Implantable Defibrillator Therapy vs. Stand Alone Implantable Defibrillator on Medical Services Utilization and Quality of Life: The Patients' View

Arthur Shiyovich ^{1,2}, Michal Palombo ^{1,2}, Amos Katz ^{1,2}, Irina Krits ², Corina Berenshtain ², Dganit Cohen ¹, Viktoria Khazan ¹, Sari Levi ¹, David Ben Shushan ¹, Vladimir Khalameizer ^{1,2}

¹ Cardiology Department, Barzilai Medical Center, Ashkelon, ² Faculty of Health Sciences, Ben Gurion University of the Negev, Beer-Sheva, Israel

Background and objectives: Implantable cardioverter-defibrillator (ICD) implantation with or without cardiac resynchronization therapy (CRT) reduces mortality and has some impact on quality of life (QOL) and medical resources utilization. Our aim was to evaluate patients' subjective view regarding the influence of ICD or ICD-CRT implantation on utilization of medical services and QOL.

Methods: patients who underwent implantation of ICD or ICD-CRT in the cardiology department of Barzilai Medical Center between 1.1.2006 to 30.04.2006 were asked to fill-out a phone-questionnaire intended to evaluate quality of life and utilization of medical services throughout one year prior to and one year following the implantation

Results: Ninety four patients participated in our study (ICD-CRT=62, ICD=32). Mean age 67.7 \pm 9.7, 77% men. Mean EF 25.1% \pm 8%; Mean NYHA FC = 2.9 \pm 0.4. ICD pts reported a 57% reduction in hospital admissions following implantation (2.7 \pm 3.5 vs. 1.2 \pm 1.9, respectively P=0.038). However no statistically significant difference was found in the number of visits to the family physician (14.7+13.7 vs. 15.3+14.8 respectively p=0.8). The ICD-CRT group reported a decrease of 52% in the mean number of admissions (2.3 \pm 3 vs. 1.1 \pm 1.9, respectively p=0.009) and as well as a 20% decrease in the number of visits to their family physician (16.9 \pm 16.2 vs. 13.5 \pm 10.4, respectively p<0.001) following implantation. Mean QOL score was significantly higher in both groups following implantation (P<0.001).

Conclusions: ICD and ICD-CRT implanted patients report a reduction in number of hospital admissions and improvement in QOL following implantation. ICD-CRT patients reported a reduction in number of visits to the family physician.