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GENDER DIFFERENCES IN THE UTILIZATION OF THE TYPE OF CARDIAC RESYNCHRONIZATION THERAPY: DATA FROM THE NATIONWIDE INPATIENT SAMPLE 2003-2009

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Authors: <u>Madhu Reddy</u>, Arun Raghav Mahankali Sridhar, Ajay Vallakati, Dhanunjaya Lakkireddy, Buddhadeb Dawn, University of Kansas Medical Center, Kansas City, KS, USA

Background: The use of cardiac resynchronization therapy (CRT)-pacemaker (CRT-P) in the US is low when compared with CRT-defibrillator (CRT-D) therapy. Whether gender differences exist in the utilization of either type of CRT is unknown.

Methods: We used the Nationwide Inpatient Sample (NIS) database (the largest all-payer, inpatient database in the US) to identify all of the patients who had a CRT implantation during 2003-2009. We analyzed this cohort for gender-based utilization, trends and hospital charges.

Results: A total of 328,623 CRT devices were implanted during this period, of which 45,374 (13.8%) were CRT-Ps. Females were much more likely to receive a CRT-P when compared with males (19.5% vs. 11.6%; p<0.001). After the initial 2 yrs (2003 and 2004) there has been a gradual increase (10.6% to 13.4%) in the proportion of CRT-P implants in the entire cohort, which was primarily driven by an increased (14.2% to 19.7%) implantation in females as compared with a minor increase (9.7% to 10.6%) in males. After adjusting for age, race, payer type, hospital type, and year of implant, females were twice as likely to receive a CRT-P compared with males (0R: 1.99; p<0.001). The mean charges were significantly lower for females vs. males (\$122,923 vs. \$126,981) and for CRT-Ps vs. CRT-Ds (\$90,475 vs \$131,516) (p<0.001 for both).

Conclusions: Our data indicate that females are twice as likely to have a CRT-P implanted compared with males. The trend of higher CRT-P implantation in females has increased in the recent years.



