the association of body mass index (BMI) with ventricular tachycardia/fibrillation (VT/VF) in males and females are limited. **Objective:** We sought to investigate sex differences in the OW/OB association with VT/VF in heart failure patients with an implantable cardioverter defibrillator (ICD).

**Methods:** We analyzed the risk of appropriate ICD therapy for VT/VF by sex and weight groups in 5,406 patients who were enrolled in the landmark MADIT (Multicenter Automatic Defibrillator Implantation Trial) and Ranolazine in High-Risk Patients with Implantated Cardioverter-Defibrillator (RAID) trials. A BMI cut-off of 25 kg/m² was used to dichotomize the study population and outcomes were analyzed separately in males and females. The primary endpoint was the first occurrence of VT/VF ≥170 bpm.

**Results:** The majority of patients were OW/OB category (males 70%, females 78%) and were younger. Among females, the 3-year cumulative event rate of VT/VF was significantly higher among females who were OW/OB when compared to those with a BMI <25 kg/m² (3-year rates: 19% vs. 11%, p=0.003, Figure A). In males, the 3-year cumulative event rate of VT/VF was similar for OW/OB patients and for those with a BMI <25 kg/m² (3-year rates: 26% vs. 25%, p=0.814, Figure B). Consistently, multivariate analysis showed that in females, being OW/OB was associated with a significant 55% increased risk of VT/VF (HR 1.55 [95% CI: 1.04, 2.30]; p=0.031) when compared to females with a BMI <25 kg/m². In males, there was no statistically significant association between weight groups and the risk of VT/VF (1.03 [0.87, 1.22]).

**Conclusion:** Patient-level data pooled from 5 landmark ICD clinical trials demonstrate that being overweight or obese is associated with a significantly increased risk for VT/VF in females, suggesting that risk factor modification and weight loss may improve outcomes in this population.

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**GENDER DIFFERENCES IN OUTCOMES OF TRANSVENOUS LEAD EXTRACTION. INSIGHTS FROM NATIONAL READMISSION DATABASE**

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**Background:** With increasing use of implantable cardiac devices, the need for transvenous lead extraction has increased which translates to increased procedural volumes. Gender differences in rates of complications in lead extraction are not well known.

**Objective:** The present study aims at evaluating the impact of gender on outcomes of lead extraction.

**Methods:** We identified 71,754 patients who presented between 2016-2019 and underwent transvenous lead extraction. Their clinical data were retrospectively accrued from the National Readmission Database (NRD) using the corresponding diagnosis codes. We compared clinical outcomes between males and females. Odds ratios (OR) for the primary and secondary outcomes were calculated, and multivariable regression analysis was utilized to adjust for confounding variables.

**Results:** Compared to males, females had a higher in-hospital complications including pneumothorax (OR 1.26, 95% CI (1.07-1.4), P<0.01), hemopericardium (OR 1.39, 95% CI (1.02-1.88), P=0.036), injury to superior vena cava and innominate vein requiring repair (OR 1.88, 95% CI (1.14-3.1), P=0.014), (OR 3.4, 95% CI (1.8-6.5), P<0.01), need for RBCs transfusion (OR 1.28, 95% CI (1.18-1.38), P=0.01) and pericardiocentesis (OR 1.6, 95% CI (1.3-2), P<0.01). 30-day readmission was also significantly higher in females (OR 1.09, 95% CI (1.02-1.17), P<0.01). There was no significant difference in In-hospital mortality (OR 0.99, 95% CI (0.87-1.14), P=0.95).

**Conclusion:** In females, lead extraction is associated with worse clinical outcomes and higher 30-day readmission.