**RELATIONSHIP BETWEEN OBESITY AND COMPLICATIONS IN ATRIAL FIBRILLATION PATIENTS UNDERGOING CATHETER ABLATION**

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Background: Obesity is associated with higher incidence of atrial fibrillation (AF) and higher recurrence rate following catheter ablation (CA). Whether obesity is associated with increased risk of CA has not been reported.

Objectives: To evaluate the relationship between complications and BMI in consecutive patients undergoing CA.

Methods: Records of patients with AF undergoing CA over 30 months were reviewed. Follow up was censored to 1 month post procedure. Patients were divided into five groups by BMI: underweight (<18.5), normal (18.6-24.9), overweight (25-29.9), obese (30-34.9), very obese (>35). Major complications included: pericardial tamponade/effusion requiring drainage, acute blood loss including retroperitoneal bleed requiring transfusion, AV fistula, and arterial pseudoaneurysm requiring thrombin injection. Minor included femoral hematoma. For continuous variables, measures of central tendency and standard deviation were provided and proportions for categorical variables. T-test was used to compare continuous variables and Fisherâ€™s exact test for categorical variables.

Results: 246 patients were assessed. Mean age was 60.2 years, 196 (79.6%) male.

Very obese group had the highest incidence of major complications (3, 7.14%) followed by obese (3, 4.4%) and overweight (4, 3.96%). BMI>25 was associated with higher total complications (p=0.22) and higher major complications (p=0.36) compared to normal and underweight population, who had none.

Conclusion: Higher BMI is associated with a trend toward increased complications during CA. Precautions such as ultrasound-guided vascular access and continuous intracardiac echocardiography may be helpful, particularly in those with greater BMIs. The limited statistical significance may reflect the relatively small cohort and low overall risk.