

Category : **Cardiovascular: Other**

A43 - Evaluation of the prognosis role of obesity in pulmonary embolism in a moroccan population

R Benmalek¹; S Zanouaki²; H Bendahou²; Y Ettagmouti²; I Nouamou²; S Arous²; ME Benouna²; A Drighil²; L Azouzi²; R Habbal²

¹University hospital IBN ROCHD, CARDIOLOGY, CASABLANCA, Morocco, ²University hospital IBN ROCHD, Casablanca, Morocco

Introduction:

Obesity is associated with many cardiovascular risk factors that could trigger venous thrombo-embolism such as venous stasis and decreased mobility. Its prevalence is quickly rising in developed countries and all over the world. Obesity is known to be an independent risk factor for pulmonary embolism (PE). However, few studies have studied the prognosis role of this parameter in PE.

Methods:

We conducted a retrospective study of 308 patients hospitalized between July 2017 and February 2021 for acute pulmonary embolism in the cardiology department of University hospital Ibn Rochd of Casablanca. We divided our populations into 2 groups depending on their Body Mass Index (BMI) : Group 1 (G1) (G2) with obesity: BMI >30kg/m², and group 2 without obesity BMI <30 kg/m². We compared their clinical, electric, echocardiographic and prognosis data.

Results:

Mean age was 54.3 ± 16.77, sex ratio=0.3. 28% of patients were in G1. Clinically, 56% in G1 versus 43% in G2 had dyspnea, 20% vs. 10% had oedema, 12% vs. 2% had hemoptysis and 10% vs. 3% presented with signs of cardiogenic shock (p<0.001). ECG signs of acute cor pulmonale were not more frequent in G1 than in G2. Diagnosis was assessed by echocardiography and Chest Computed tomography angiography (CTA). A cardiac thrombi was found in 8% vs. 2%, right ventricular dysfunction in 24% vs. 15% (p=0.016). Paradoxal septum and pulmonary hypertension occurred in more than 56% of G1 vs. 34% in G2 (p=0.004). Thrombolysis was used in 4% of G1, unlike patients in G2 who didn't undergone thrombolysis (p<0.001). In-hospital mortality was not significantly different between the 2 groups (p=0,17)

Conclusion:

In our study, patients with obesity presented with more severe symptoms with more cardiogenic shock and had more significant echocardiographic signs of PE than patients with no obesity. However, the difference of in-hospital mortality was not significant in our study.