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Title: *Analysis of Direct Acting Oral Anticoagulants for Venous Thromboembolism Treatment in Obese Patients*

Introduction:

Direct oral anticoagulants have been shown to be effective in VTE, but there is still a lack of clinical data on patients that have a BMI >40.

Methods:

We conducted a clinical chart review, to evaluate if there were no differences between the different BMI categories. We reviewed patients that were admitted to St. Elizabeth's Hospital and diagnosed with a VTE in patient. Patients were evaluated for major bleeding, minor bleeding, and clotting.

Results:

The study included 75 patients that were diagnosed with VTE. There were no patients that experience major bleeding and 11 had experienced minor bleeding. The patients in the BMI between 18.5-24.9 had 3 events of minor bleeding compared to the patients that were in the BMI>40 had 1 event of bleeding ( $p=0.314648$ ). There was also a total of 3 clotting events in the BMI 18.5-24.9 group, compared to the 4 clotting events in the BMI >40 group ( $p=0.55409$ )

Conclusion:

At this time patients that have an elevated BMI >40, has not been shown to be any different to patients at a BMI between 18.5 and 24.9, but patients in the BMI>40 did show that there is a difference between patients in the BMI<40 category. The data gathered from St. Elizabeth's hospital may support a difference in these patients, but there should be more data and research on patient follow-up to confirm this data and if a patient does have a BMI >40 they should be monitored for clotting more closely, than patients with a BMI<40.