Disclosures

- None

Introduction

- Both the Edinburgh and Bonn Vein studies, identified obesity as a risk factor for the development and progression of CVI.

- Obesity was a risk factor that was independent of age, sex, or other known CVI risk factors. In addition, CVI severity was more pronounced in obese patients.

- Despite the correlation between obesity and CVI, there are few investigations which assess the effect of obesity on CVI treatment outcomes and treatment types.

Methods

- Data from 64,368 patients (77% female and 23% male) from January 2015 to December 2017 was retrospectively analyzed to determine efficacy of the following CVI treatments:
  - endovenous thermal ablation,
  - ambulatory microstab phlebectomy
  - ultrasound guided foam sclerotherapy

- Of the patients assessed, 25,592 patients were intervened on. A total of 40,061 procedures were performed.

- The patients were divided into the following BMI categories:

- Outcomes were subcategorized by CEAP class for each BMI category

- Revised Venous Clinical Severity Score (rVCSS) was used to determine treatment efficacy

Goals

- Objective 1:
  - To determine the relationship of obesity and CEAP to post procedure rVCSS score.

- Objective 2:
  - To determine relationship of obesity to outcomes of various CVD treatments

Effect of Ablation stratified by CEAP and BMI

[Graph showing the effect of ablation stratified by CEAP and BMI]
Results: CIVIQ 20 QoL

- Progressive increases in BMI are associated with worse outcomes.
- A BMI greater than 35 appears to be the cutoff where worse outcomes begin to be observed as measured by rVCSS and CIVIQ 20 data.
- The addition of phlebectomy improves outcomes by about 10%. The addition of ultrasound guided foam sclerotherapy after ablation and phlebectomy does not further improve outcomes.
- A BMI of >46 demonstrates minimal improvement after CVI treatment.
- Weight loss therapy should be considered in patients with a BMI ≥46 before offering CVI therapies.