Objective: The number of office based lower extremity angiograms has skyrocketed in recent years. Some of these are performed with anesthesia while others are not. Since the utility of anesthesia has not been explored in this setting, we investigated whether the use of anesthesia had an impact on post-operative pain.

Materials and Methods: We performed 381 lower extremity angiograms in 218 patients between 8/5/2012 and 12/21/2017. Of these, 364 included angioplasty and 337 included stenting. Prior to August 2016 all procedures were performed without anesthesia. After this, we preferentially used sedation administered by an anesthesiologist. Data on Linkert score were collected 2.5 hours post-operatively. Data on pain, sedation, age, gender, indication, laterality, level of disease were analyzed in Microsoft XLSTAT.

Results: Two-hundred and sixty-eight lower extremity angiograms were performed in 178 patients without IV sedation and 132 were performed in 96 patients with IV sedation. Patients ranged in age from 40 to 91 years (mean = 70.6). One hundred and twenty-three angiograms were performed on the right and 214 were performed on the left. Angiograms showed disease level was: iliac in 35, femoral-popliteal in 286, infrapopliteal in 3 and multilevel in 59. Average pain scores were 0.315 for procedures without anesthesia and 0.661 for procedures with anesthesia (p = 0.048). Patients reported pain in 10.6% of procedures without anesthesia and 13.5% of procedures with anesthesia (p = 0.529). Pearson correlation analysis for age and pain score yielded 0.006 (p = 0.117). Average pain scores in males and females were 0.377 and 0.514 respectively (p = 0.354) and 0.464 and 0.381 in the right and left extremities (p = 0.556). Average pain scores by indication were: 0.440 for claudication, 0.452 for critical limb ischemia, 0.222 for restenosis, 1.67 for bypass failure and 0.00 for aneurysm (p = 0.450). Average pain scores by level were 0.257 for iliac, 0.420 for femoral-popliteal, 0.667 for infrapopliteal, and 0.525 for multilevel (p = 0.814).

Conclusion: Our data suggests that the use of IV sedation did not affect pain scores in our population. Age, gender, indication, laterality and level of disease were not associated with pain score.