LOCATION OF FEMORAL ARTERIOTOMY SITE USING ANATOMICAL LANDMARKS: CORRELATION WITH ACCESS SITE COMPLICATIONS

i2 Poster Contributions
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Background: The aim of the study was to document the frequency of desired versus alternative arteriotomy location and its correlation with vascular complication in contemporary practice.

Methods: We retrospectively evaluated femoral angiograms of 309 patients undergoing PCI to identify the location of the arteriotomy that had been performed using anatomical landmarks. Patients were divided into two groups based on the location of the arteriotomy: above the femoral bifurcation and below the inferior border of the inferior epigastric artery (optimal location) and those that were either above or below these landmarks (alternative location). Frequency of access site complications were recorded.

Results: Femoral arteriotomy was located outside the optimal location in 40 (13.0%) patients. 21 (7.0%) were located above the inferior border of the inferior epigastric artery and 18 (6%) below the femoral bifurcation. There was no significant difference in baseline characteristics between the groups. Vascular complications were significantly more frequent in patients who had a femoral arteriotomy outside the optimal location (25% vs 7%, p= 0.002) (figure).

Conclusions: Femoral arteriotomy is not optimally located in a significant proportion of patients and this is associated with an increased risk of vascular complications. The data highlights the need to improve femoral access techniques in order to reduce bleeding.