FEASIBILITY OF ULNAR ARTERY INTERVENTION (AJMER ULNAR ARTERY INTERVENTION GROUP STUDY: AJULAR): EARLY RESULTS

Authors: Rajendra Gokhroo, Kamal Kishor, Bhanwar Ranwa, Devendra Bisht, Sajal Gupta, Avinash Anantharaj, Kumari Priti, Jawahar Lal Nehru Medical College, Ajmer, India

Background: Although diagnostic catheterization and percutaneous coronary intervention via transulnar access (TUA) is a safe alternative to transradial access (TRA), ulnar artery is rarely utilized for this purpose. The present study attempted to assess the feasibility and safety of TUA.

Methods: In a high volume single center (>2000 procedures/yr) 2000 patients were enrolled prospectively [TRA (n=1000) vs TUA (n=1000); 1:1 randomization]. Primary end points (composite of major vascular complications: Spasm, Crossover or Local hematoma with ≥3gm% Hemoglobin drop) and feasibility parameters (Puncture time and Fluoroscopy time) were assessed after every 50 procedures in either limb to analyze end points at different stages of the learning curve.

Results: In operators beyond initial phase of the learning curve (initial 50 procedures) major vascular complications and puncture time did not differ significantly between the two groups (Fig.1).

Fluoroscopy time did not show significant difference (4.3±1.3 min in TRA versus 4.8±1.6 min in TUA; p value>0.05) irrespective of the route used / operator’s experience.

Conclusion: TUA is feasible and a safe alternative to TRA. The steepness of the learning curve in its initial phase while switching over from TRA to TUA is no different from the limitations faced by a femoral trained operator switching over to TRA. However, with experience, of as few as 50 procedures, the learning curve becomes comparable to TRA in terms of safety and feasibility.