

Distal Trans-Radial Artery Access for Coronary Intervention: Avicenne Military Hospital Experience in Marrakech

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Abstract

Original Research Article

The radial approach for percutaneous coronary interventions (PCIs) is a commonly employed technique, although it carries the risk of radial artery occlusion, which can limit future access options (1). To address this concern, the distal radial (dTRA) approach has garnered attention as a potential solution to mitigate vascular complications (3). However, data on its efficacy in North African populations remain scarce. This retrospective study aimed to evaluate the feasibility, safety, and complication rates of dTRA access for cardiac catheterization. Ninety-five patients underwent dTRA catheterization at Avicenne Military Hospital in Marrakech between January 2023 and April 2024. Results demonstrated a low complication rate (1.05%) and successful completion of procedures in all patients. Larger studies are warranted to validate the efficacy of dTRA compared to traditional radial access methods (7).

Keywords: Polysplenia; Annular pancreas; CT.

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INTRODUCTION

The radial artery serves as a preferred access site for coronary interventions due to its accessibility and lower complication rates compared to femoral access [2]. However, concerns regarding radial artery occlusion have prompted exploration of alternative access techniques, such as the distal radial (dTRA) approach [4]. While the dTRA approach offers potential advantages, including reduced risk of occlusion and improved patient comfort [5], there is limited data on its efficacy in diverse patient populations. This study aimed to address this gap by evaluating the feasibility, safety, and complication rates associated with dTRA access for cardiac catheterization in a North African cohort.

MATERIALS AND METHODS

A retrospective analysis was conducted at Avicenne Military Hospital in Marrakech, encompassing patients who underwent cardiac catheterization via the dTRA approach between January 2023 and April 2024. Procedural details, including the type of catheters used and any complications encountered, were recorded. Patient demographics and clinical characteristics, such as prior history of percutaneous coronary intervention (PCI), were also documented.

RESULTS

Ninety-five patients underwent cardiac catheterization via the dTRA approach during the study period. The majority of patients presented with chronic coronary syndrome (70.52%), reflecting the prevalence of coronary artery disease in the study population [6]. Notably, all procedures were successfully completed via dTRA access, underscoring the feasibility of this technique in the study setting [8]. The observed complication rate was low (1.05%), primarily consisting of minor hematoma formation at the access site, consistent with previous reports [3].

CONCLUSION

In conclusion, the dTRA approach demonstrates feasibility and safety in invasive coronary procedures, as evidenced by successful completion and minimal complications observed in this study. These findings support the adoption of dTRA access as an alternative to traditional radial approaches, particularly in populations at higher risk of vascular complications. However, further research, including larger-scale studies and randomized trials, is warranted to establish its comparative efficacy and long-term outcomes.

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