

# Jordan University of Science and Technology

## Single-Center Experience Following the Introduction of a Percutaneous Endovascular Aneurysm Repair First Approach.

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**Abstract:** We evaluated our experience following the introduction of a percutaneous endovascular aneurysm repair (pEVAR) first approach using Perclose Proglide assessing efficacy, complications, and identification of factors that could predict failure. A retrospective cohort study on patients over a 2-year period following the introduction of a pEVAR first approach was performed. The primary end point was defined as successful deployment and access site hemostasis. Percutaneous EVAR was technically successful in 41 (77.4%) of 53 patients and 83 (86.5%) of 96 access sites. Factors associated with failure were smaller common femoral artery (CFA) diameter ( $P = .045$ ) and CFA circumferential calcification of greater than 50% ( $P = .0001$ ). The incidence of access site infection was significantly higher in the failure group ( $P = .008$ ) as was procedure duration ( $P = .026$ ). Percutaneous EVAR first approach must be introduced with caution. Percutaneous EVAR failure occurs more often in patients with unfavorable access site anatomy. Success rate can be improved with careful patient selection.