Introduction

Vascular access, whether arterial or venous, was utilized in over 13.2 million procedures in the U.S. in 2013. Transradial approach (TRA) for cardiac catheterization and percutaneous coronary interventions is increasingly being used worldwide in procedures because it is associated with fewer vascular complications compared to the transfemoral approach and allows immediate ambulation. Techniques gleaned from the TRA are also translatable to other access techniques being used more frequently in PVD treatment including the popliteal and pedal approach.

Description

In order to simplify the radial and pedal technique, we have developed a basic needle approach to arterial access with a 24 gauge needle and .035 wire. Accessing with the small gauge needle results in immediate .035 wire passage eliminating the need for a micro-sheath placement before placement of a 5 French or larger sheath.

Clinical Use

We have utilized the punctual guidewire in a porcine model to obtain immediate and reliable blood flashback and .035 access. We feel this simple access device will not only be useful with experienced operators, but also with trainees for radial and pedal access. It also may have a much wider application in venous access.

The Punctual Guidewire while originally conceived for use in the Trans Radial Access market, can also be designed to replace a standard micropuncture kit in all vascular applications. The Punctual Guidewire offers less trauma, faster access and few complications.