

**PILOT TRIAL COMPARISON OF A KAOLIN-BASED HEMOSTATIC PAD (QUIKCLOT® RADIAL™) VERSUS MECHANICAL COMPRESSION (TR BAND®) TO REDUCE COMPRESSION TIME FOLLOWING TRANSRADIAL ACCESS**

Poster Contributions
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Background: Hemostasis following transradial access (TRA) is usually achieved by mechanical compression. There are very few studies comparing use of a kaolin-based hemostatic pad versus standard mechanical compression with TR Band® (Terumo Medical, Japan) for TRA. Herein we investigated the feasibility and efficacy of the QuikClot® Radial™ (Z-Medica Corporation, Wallingford, CT, USA) to successfully shorten hemostasis after TRA, compared with the TR Band®.

Methods: Thirty patients (67% male, mean age 65 ± 11 years) undergoing transradial diagnostic angiography (73%) or coronary intervention (27%) were randomized into three cohorts post TRA: 10 patients received standard mechanical compression (120 minute weaning protocol) with the TR Band®, 10 patients received 30 minutes of compression with the QuikClot® Radial™, and 10 patients received 60 minutes of compression with the QuikClot® Radial™. Time to hemostasis and access site complications were recorded. Radial artery patency was studied one hour after hemostasis was obtained by the reverse Barbeau's test.

Results: There were no differences in baseline patient characteristics, mean dose of heparin (7,117 ± 1,054 IU) and the mean ACT value (211 ± 50 s) at the end of procedure among the 3 groups. Successful hemostasis was achieved in 100% of patients randomized to both 30 minute and 60 minute compression using the QuikClot® Radial™. Hemostasis failure occurred in 50% of patients when the TR Band® was initially weaned by removing 2 cc's of air at the protocol driven 40 minutes after sheath removal. Mean compression time for hemostasis with the TR Band® was 149.4 minutes, compared with 30.7 and 60.9 minutes for the 30- and 60-minute QuikClot® Radial™ groups, respectively. No radial artery occlusion or other complications occurred in any subject at the end of the study.

Conclusions: Application of the QuikClot® Radial™ hemostatic pad following TRA in this small pilot trial significantly shortened hemostasis times when compared with mechanical compression using the TR Band®. There was 100% successful hemostasis with both the 30- and 60-minute compression groups with the QuikClot® Radial™, with no increased complications noted.