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USE OF THE STERI-STRIPS IN ACHIEVING RADIAL ARTERIAL ACCESS HEMOSTASIS

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Objectives: The compression duration of the radial artery remained a key concern after coronary angiography (CA) and interventions via trans-radial access (TRA). We evaluate the impact of application of steri-strips along with conventional pneumatic trans-radial (TR) band on duration of compression required for hemostasis after diagnostic CA.

Methodology: In this open labeled randomized clinical trial, total of 209 patients who underwent diagnostic CA were randomized in 1:1 ratio into TR band with steri-strips (treatment) and conventional TR band alone (control) for achieving hemostasis. All patients were followed for 1 month. The primary endpoint was the duration of application of TR band and secondary endpoints were radial artery occlusion (RAO) and major bleeding.

Results: 106 patients received steri-strip along with TR band and 103 patients received TR band alone. The median duration of application of TR band was 60 [IQR: 60-60] min in the treatment group and 250 [IQR: 240-360] min in the control group; p≤0.001. The major bleed requiring reapplication of TR band was 9.4% vs. 4.9%; p=0.364 and hematoma (type I only) was 7.5% vs. 9.7%, p=0.578 in the treatment and control group respectively. Radial artery was palpable in 95.3% vs. 85.4%; p=0.016 after 24 hours and 96.2% vs. 88.3%; p=0.032, at 1 month in the treatment and control arm respectively.

Conclusion: Use of steri-strips is helpful in significantly reducing the compression duration of TR band and improving the patency of radial artery after diagnostic angiography with no significant rise in hematoma or major bleeding complications. Keywords: Steri-strips, radial artery, pneumatic TR band, coronary angiography, radial artery patency, radial artery occlusion.

Keywords: Radial artery, hemostasis, coronary angiography, percutaneous coronary intervention, trans-radial, radial artery occlusion, hematoma, Steri-strips, TR band


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