New device reduces hemostasis time following catheterization and improves efficiency

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A new study reveals the use of a potassium ferrate hemostatic patch (PFHP) reduces the time to hemostasis for patients receiving cardiac catherization. The findings indicate a faster approach to removing the compression band used during the procedure, without compromising safety. Positive results of the STAT2 trial follow an initial pilot study and are being presented as late-breaking clinical science at the Society for Cardiovascular Angiography and Interventions (SCAI) 2021 Virtual Scientific Sessions.

Cardiac catherization is a procedure performed to evaluate the heart or arteries for patient diagnosis and interventions. This is increasingly performed using transradial approach, where a catheter is inserted through radial artery in the arm to the heart. A compression device called a TR band (TRB) is used to close the hole in the wrist made during the catherization process. Standard protocols require the band to be left on for at least two hours following the procedure.

The study evaluated the use of the StatSeal device patch compared to using a TRB alone in order to reduce time to hemostasis after transradial access. The study enrolled 443 patients across three centers, including 27.5% receiving percutaneous coronary intervention (PCI). Patients were randomized 1:1 to either the TRB alone or the TRB in addition to the potassium ferrate hemostatic patch. Both groups had complete TRB deflation attempted at 60 minutes post-procedure. Findings demonstrate the adjunctive use of the patch is safer and faster in deflating the TRB and reduced rebleeding. From a prior pilot study, discharge times were reduced with the use of the Statseal.

"By bringing observation times down from two hours to one, the use of the hemostatic patch has the potential to change practice because we can move toward same-day discharge protocols for cardiac catherization patients," said Arnold H. Seto, MD, MPA, FSCAI, Long Beach VA Health Care System. "We would be able to shift from long observation times and more frequently tell a patient, 'you are going home today.' This is really important for both the clinician and the patient."

Results showed the time to complete TRB deflation was shorter with the PFHP compared to for TRB alone (65.9 ± 14.1 min vs. 112.8 ± 56.3 min, P