In ablation for persistent atrial fibrillation, 'less may be more'

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In patients with persistent atrial fibrillation (AF) - an abnormal heart rhythm – treating only the pulmonary veins with a procedure called ablation resulted in reasonable outcomes without the need to treat other areas of the heart, according to a new study presented as a Hot Line today at ESC Congress 2014.

"Addition of further ablation increased treatment time but did not reduce the recurrence of AF," said Atul Verma, MD, a cardiologist from Southlake Regional Health Centre, in Newmarket, Canada, and principal investigator of the Substrate and Trigger Ablation for Reduction of Atrial Fibrillation Part 2 (STAR AF 2) trial.

STAR AF 2, was conducted in 12 countries, and is the largest randomised trial to examine outcomes of ablation in persistent AF.

"The results of this trial will likely change practice by shifting the focus to shorter and more effective pulmonary vein ablation alone without the addition of other ablation," he said. "Our results have important implications for procedural safety and duration. Experts will need to reconsider current ablation guidelines to reflect these findings in patients with persistent AF."

During ablation, catheters inserted into the heart deliver radiofrequency energy to destroy areas that trigger rhythm abnormalities. Despite limited data on the outcomes of ablation in persistent AF, current guidelines recommend more extensive ablation beyond just the

pulmonary veins alone, explained Dr. Verma.

STAR AF 2 was designed to explore the optimal method and outcomes of ablation in persistent AF.

A total of 589 patients with persistent AF were randomised to receive either pulmonary vein ablation alone (PVA; n=67); PVA plus ablation of atrial regions of the heart that produce abnormal electrograms (PVA+electrograms; n=263); or PVA plus ablation of linear lesions in the left atrium (PVA+lines; n=259).

Most patients (76%) had been experiencing continuous atrial fibrillation for at least 6 months before their treatment (median duration 2.2 years).

Successful pulmonary vein ablation was achieved in 97% of all patients with no differences between groups, however, procedural time was significantly shorter for the PVA alone group (167 mins) compared to the PVA+electrograms and PVA+lines groups (229 and 223 mins respectively; p