Abstract: **P1005**

Pulmonary vein isolation using a high power short duration CLOSE protocol: towards a shorter procedure duration.

**Authors:**
B Berte\(^1\), G Hilfiker\(^1\), I Russi\(^1\), R Kobza\(^1\), \(^1\)Lucerne Cantonal Hospital - Lucerne - Switzerland,

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Introduction

The CLOSE protocol combines Ablation Index (AI) and \(=6\) mm interlesion distance using standard power settings for the treatment of atrial fibrillation (AF). High Power Short Duration (HPSD) strategies are recently investigated to optimize procedure efficiency and cath lab utilization.

**Purpose**

To compare safety and efficacy of a conventional CLOSE and a HPSD-CLOSE pulmonary vein isolation (PVI) strategy.

**Methods**

All consecutive patients referred for PVI were included after informed consent. The first cohort was treated with a standard CLOSE protocol (35 Watts anterior and 25 Watts posterior). and the second cohort with a HPSD-CLOSE protocol (45 Watts anterior and 35 Watts posterior). Procedural parameters and 6-months follow-up were analyzed.

**Results**

In total, 141 patients [CLOSE: \(n=94\) (paroxysmal: \(n=74\)); HPSD: \(n=47\) (paroxysmal: \(n=36\)), similar baseline characteristics] were included. PVI was reached in all but procedure duration \([86\pm21\text{min vs } 107\pm25\text{min}; p<0.0001]\) and RF time \([23\pm6\text{min vs } 36\pm10\text{min}; p<0.0001]\) was shorter in HPSD vs CLOSE. First pass isolation was similar in HPSD vs CLOSE [left veins: 89% vs 90%; \(p=0.8\) and right veins: 83% vs 80%; \(p=0.9\)]. Six-months off-AAD freedom of AF/AT was similar in HPSD vs CLOSE [89% vs 86%; \(p=0.6\)]. Major complications were similar (CLOSE 2% vs AI: 2.5%; \(p=1\)).

**Conclusion**

A high-power short duration approach can shorten procedure and ablation time without having a negative impact on safety or efficiency.