

Atrial fibrillation ablation in athletes: 5-years experience of a single italian third-level center

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Background: The number of master athletes is increasing and treatment of AF is mandatory for sports continuation. However, few data exist about the effectiveness of catheter ablation (CA) in athletes and the feasibility of resuming vigorous exercise afterwards.

Objectives: Aim of our study was to analyze the efficacy and safety of AF CA in athletes and to evaluate the feasibility of resuming vigorous exercise.

Methods: We report a retrospective registry of athletes referred to our center for AF CA in the last five years. All athletes were previously declared non-eligible to competitive sport because of recurrences of AF or evidence of persistent asymptomatic AF. CA was performed as per practice and recurrences were defined as recrudescence of symptoms and/or any documentation of AF lasting more than 30 sec. At the end of the follow-up all pts were asked about resuming sport.

Results: We ablated 40 athletes (38 males, 95%) with a mean age of

48±13 years. Mean left atrium volume was 36±11 ml/m² and mean ejection fraction was 61±5%. Distribution between AF characteristics was: 31 (78%) paroxysmal AF, 8 (20%) early-persistent AF, 1 (2%) long-persistent AF.

After a median follow-up of 787 days, 62,5% of athletes were free from recurrences after one CA procedure and mostly without antiarrhythmic drugs (87%). 7 athletes underwent a redo procedure and all of them were then free of recurrences with an overall freedom from recurrences of 84%. No major complication was observed. Athletes practicing endurance sports showed a negative trend in terms of recurrences (p = ns).

Most (72%) of the athletes resumed vigorous exercise after at least 3 months from the CA as per Italian sport protocols.

Conclusions: CA is safe and efficient in treating AF also in athletes. Resuming high intensity sports is often possible after 3 months from CA.

