



THE SUCCESS RATE OF RADIOFREQUENCY CATHETER ABLATION IN WOLFF-PARKINSON-WHITE SYNDROME PATIENTS: A SYSTEMATIC REVIEW AND META-ANALYSIS

Abdelrahman Farag¹, Mohamed Tarek², Shadi Alaa², Esraa El Sayed²

¹ Al Azhar Faculty of Medicine, ² Al Azhar Medical School,

Correspondence: Abdelrahman Farag, a.faragsherdia@gmail.com

Background:

Radiofrequency catheter ablation (RFA) is the first-line therapy for symptomatic Wolff Parkinson white (WPW) patients according to the American Heart Association. We conducted this study to assess the success rate, recurrence rate, and rate of complications associated with the utilization of radiofrequency catheter ablation for managing patients with WPW.

Methods:

We searched on PubMed, Cochrane library, Web of Science and Scopus databases using all identified keywords and index terms through 4 January 2022. We included all studies conducted on patients with WPW who were treated with ablation. We conducted the analysis using Meta Analyst and MedCalc version 19.1.

Results:

We found 2268 unique articles. We included only 11 articles that meet our inclusion criteria. The pooled effect estimates showed high success rate (94.1% [95% CI: 92.3-95.9], $p < 0.001$), low recurrence rate (6.2% [95% CI: 4.5-7.8, $p < 0.001$]) and low rate of complications (1% [95% CI: 0.4-1.5, $p < 0.001$]).

Conclusion:

RFA showed a high success rate, low recurrence rate and low rate of complications in WPW patients.