

ANTITHROMBOTIC USE HAS NO EFFECT ON PRIMARY FAILURE OR OVERALL SURVIVAL OF FIRST AV FISTULAE

Alexander Murley, Anika Wijewardane, Clive Allen, Sarah Powers, Lee Hollingsworth, Teun Wilmink and Jyoti Baharani
Heartlands Hospital, Birmingham, UK

OBJECTIVES

- Fistula complications are a common reason for hospital admissions in dialysis patients
- Conflicting existing evidence as to whether antithrombotic use is beneficial in preventing fistula failure
- Is there any evidence we can find that would support physicians and surgeons decide whether to start an antithrombotic pre-surgery?

METHODS

- Study period Jan 2004 – Dec 2011
- Data collected from prospectively database of fistula operations and compared with PROTON (renal database that records every dialysis session) & hospital electronic patient record that includes information on patient demographics and copies of all clinic letters
- Retrospective analysis of antiplatelet use recorded in the preoperative renal + vascular surgery clinic letters

DEFINITION OF END POINTS

Fistula primary failure: Failure to reach 6 dialysis sessions

Fistula survival: Up to when fistula abandoned for new access

RESULTS

- 671 patients having first fistula operation included in analysis . 47 patients excluded prior to analysis due to unknown outcomes.
- Mean age 66 (range 24-92), 62% Male, 42% Diabetic, 24% non Caucasian ethnicity
- Antithrombotic use increased over time (31% in 2004 to 50% in 2011)
- No difference in primary failure rate between patients taking or not taking antiplatelet at the time of surgery (see table and graph)
- Antiplatelet use had no significant effect on the proportion of patients who had interrupted dialysis sessions from when the fistula was first used (34% vs 39%) (i.e. no delayed dialysis due to increased complication rates).
- No different in overall survival between patients on antiplatelets, anticoagulants or no antithrombotic.

Primary failure of first fistula is unaffected by antithrombotic use

Was the fistula used for six consecutive dialysis sessions at any time?

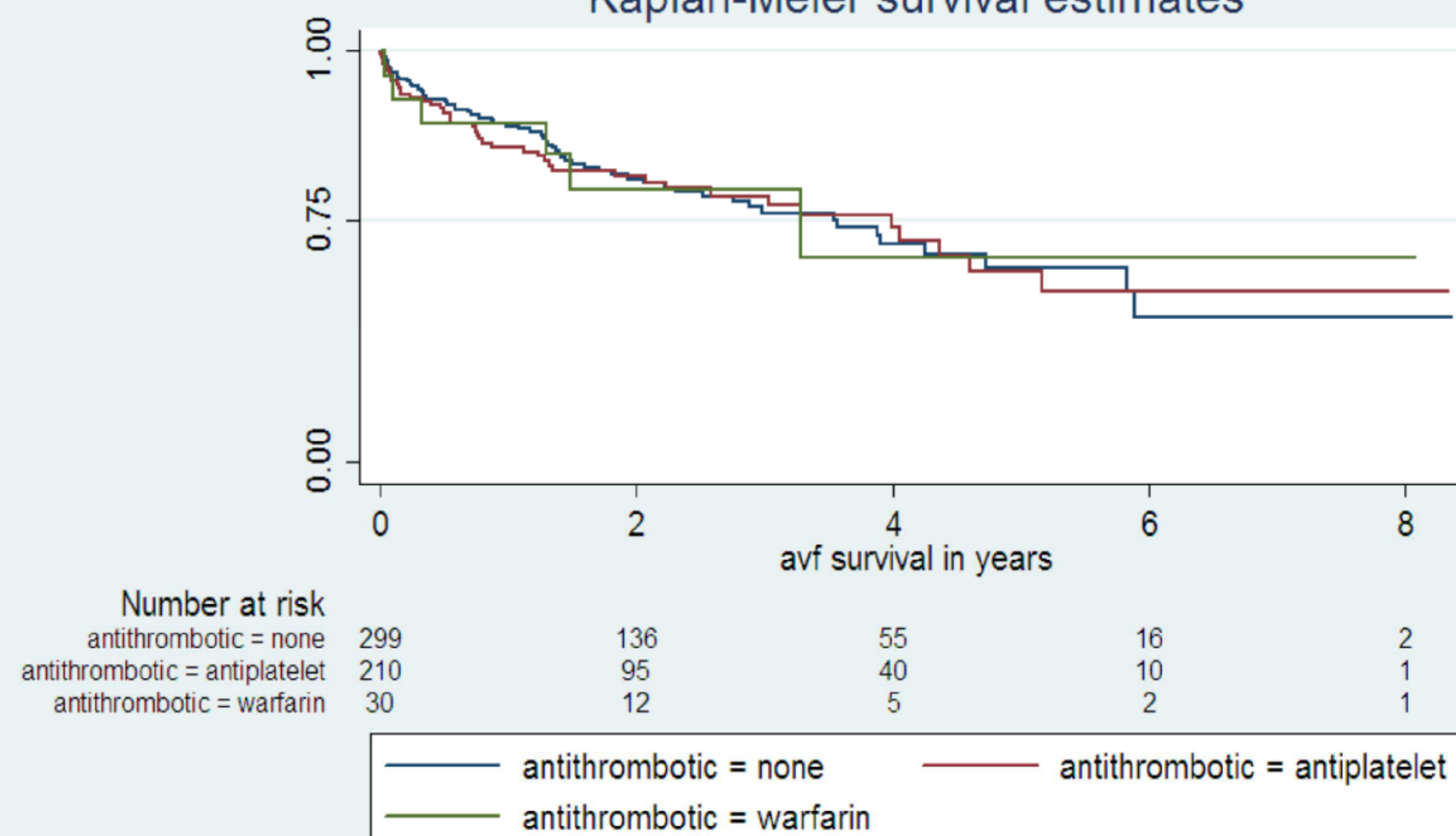
	Yes	No
None	302 (81%)	70 (19%)
Antiplatelet	211 (81%)	510 (19%)
Warfarin	32 (82%)	7 (18%)

P = 0.98

Overall survival of first fistula is unaffected by antithrombotic use

Log rank test p 0= .98

Kaplan-Meier survival estimates



CONCLUSIONS

- 671 patients undergoing their first fistula operation
- Antithrombotic use had no effect on primary failure rates
- Antithrombotic use had no effect on overall survival rates of first fistulas
- Antithrombotic use did not result in delayed or interrupted dialysis through the new fistula

Our work does not support antithrombotic use to improve fistula outcomes but there is no evidence of increased complication rates in patients taking antithrombotic medication for other indications.

