

When Less is More: An Anticoagulation Service Initiative to Target Combination Antithrombotic Therapy

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BACKGROUND

Societal guidance discourages combining antiplatelet therapy (APT) with anticoagulation therapy in the majority of patients.^(1, 2, 3, 4, 5) Exceptions may include patients in whom the “benefit is known or is highly likely to be greater than harm from bleeding, such as patients with mechanical heart valves, patients with acute coronary syndrome, or patients with recent coronary stents or bypass surgery.”⁽¹⁾ Despite this, co-prescription rates as high as 35-45% have been documented in the literature.^(6, 7) Combination antithrombotic therapy (CAT) has been associated with a 1.5 – 2-fold increase in the risk of serious bleeding.⁽⁸⁾

OBJECTIVE

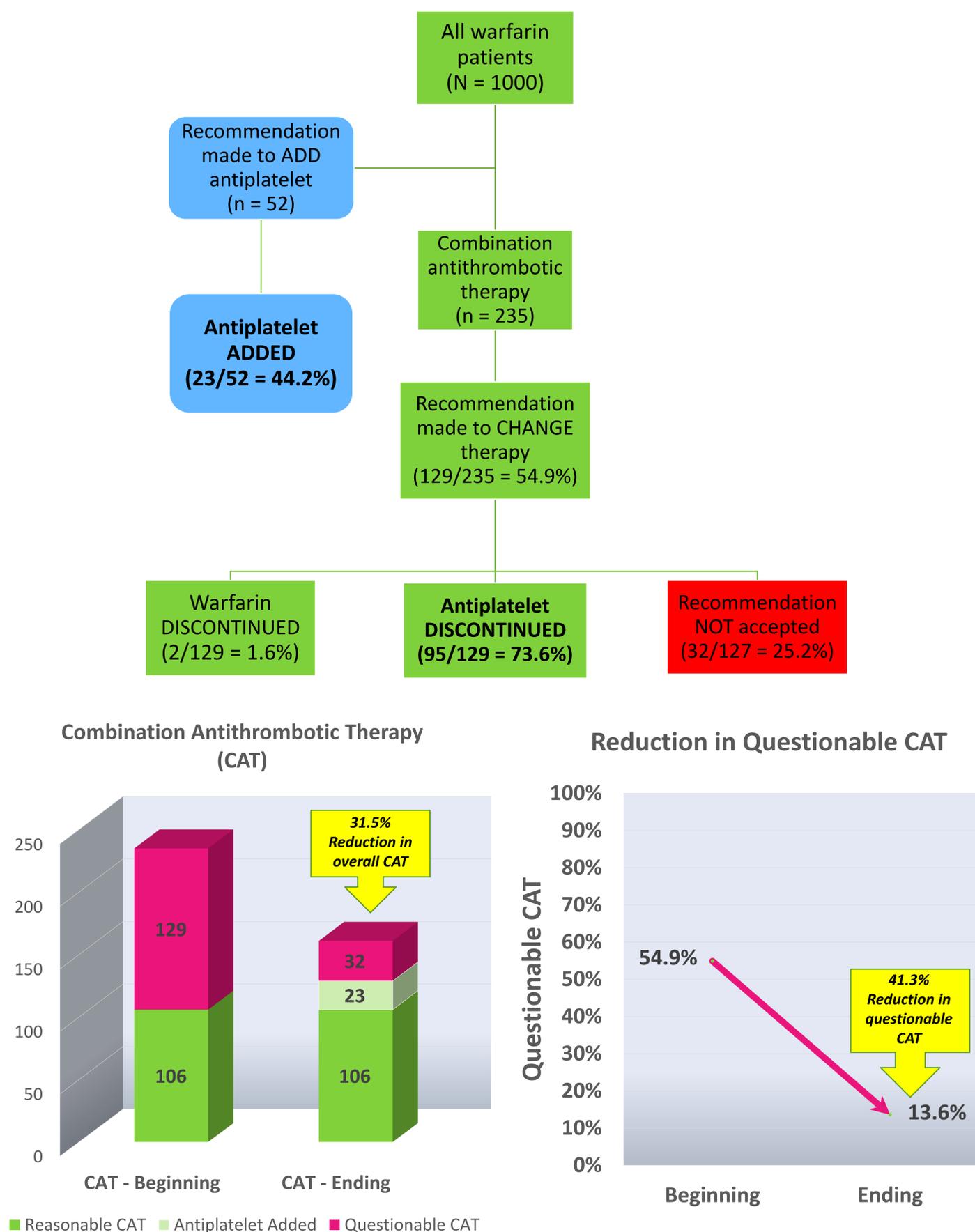
In an effort to promote guideline-based care and reduce complications and their associated cost, a nurse-led project was undertaken to identify and critically evaluate patients prescribed CAT at our facility. In the process, providers and patients were simultaneously educated.

METHODS

We identified 235 out of 1,000 patients (23.5%) prescribed both warfarin and APT. A nurse screened for the presence of mechanical valve prostheses or history of acute coronary syndrome or revascularization within the past year. Patients not meeting these criteria for APT had guideline-based recommendations made by a clinical pharmacy specialist to the primary care provider or responsible specialist (i.e., cardiologist, neurologist, vascular surgeon, etc.). In addition, recommendations were made for patients in whom APT was potentially indicated but not utilized.

RESULTS

Of the 235 patients identified, 106 (45.1%) met criteria for CAT. We recommended reevaluation of therapy in 129 (54.9%) patients, resulting in APT or warfarin discontinuation in 96 and 2 patients respectively. Recommendations to add APT were made in 52 patients with 23 (44.2%) accepted.



DISCUSSION

The CAT population we were initially able to identify represented 23.5% of patients prescribed warfarin - lower than established benchmarks. This was most likely driven by existing strong practices targeting ATP at the time of consultation. We found very few patients co-prescribed ATP for primary prevention which seems to drive a significant amount of use in other studied populations. A recommendation to discontinue ATP was most commonly made in patients with stable coronary artery disease (CAD). Our efforts resulted in a 41.3% reduction in the use of questionable CAT. Since we recommended the addition of ATP in 23 patients with mechanical heart valves, the overall impact was a 31.5% reduction in overall CAT. These efforts also drove provider education and, as a result, may serve to influence future prescribing practices.

LIMITATIONS

- Only those patients with warfarin prescribed and managed through the anticoagulation service were included.
- It is possible that some patients were taking undocumented ATP. While nearly 70% of patients underwent chart review, screening of all patients was not feasible.

REFERENCES

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