

Assessment of the Use of Low-Dose Aspirin as A Primary Prevention Strategy in the Elderly, 4/1/19-5/1/20

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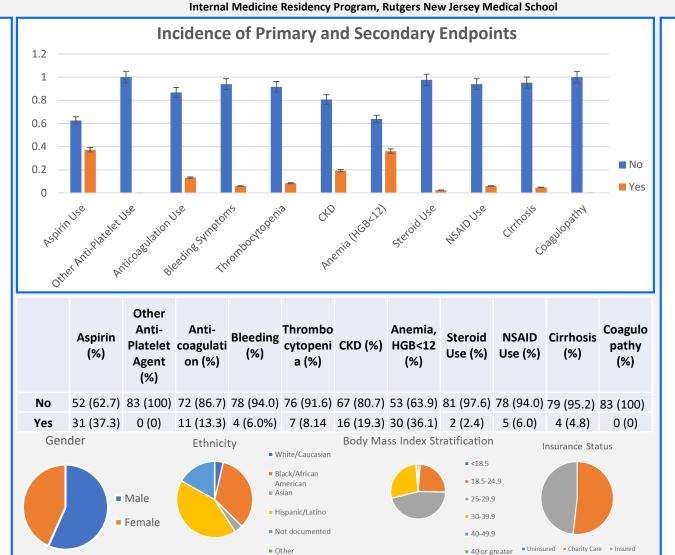
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Background:

Aspirin is used widely for its antiplatelet effects in primary prevention against atherosclerotic cardiovascular disease. In March 2019, the American College of Cardiology recommended against the primary prevention of atherosclerotic cardiovascular disease with low dose aspirin (81mg daily) in patients with age > 70 years. New and accumulating evidence points towards increased bleeding risk in certain patient populations with use of lowdose aspirin.

Methods:

Retrospective chart review of 120 patients randomly selected from ACC clinic between 04/1/19-05/1/20. Patients aged > 70 were assessed to determine the percentage on low-dose aspirin for primary prevention. Age, gender, race, history of peptic ulcer disease, CKD, history of bleeding, thrombocytopenia or concomitant anticoagulation use will also be evaluated. Exclusion criteria were age less than 70 years old and patients on aspirin for secondary prevention due to CAD, TIA, CVA or PVD history. Of the 120 randomly selected patients, 83 met inclusion criteria. Statistical analysis was performed using Microsoft Excel statistical package.



HLD (%)

59 (71.1)

24 (28.9)

HTN (%)

76 (91.6)

7 (8.4)

Present

Not Present

Results:

Patients analyzed had a mean age of 75.96 years with a standard deviation of 5.3. There were roughly equal numbers of men and women (56.6% and 43.4%, respectively). The overwhelming majority of patients identified as African American (33.8%) or Hispanic (42.2%). Most patients were insured (48.2%) or had Charity Care (51.8%). The highest concentration of patients had a BMI in the obese range (45.8%). Our analysis found that 31 of 83 patients, or 37.3% of patients over the age of 70 were prescribed low-dose aspirin. Within this group of patients, 91.6% had HTN, 71.1% had HLD, 30.1% had T2DM, 19.3% had CKD, 36.1% had anemia, and 39.7% of patients either smoke or smoked previously. Patients had an average of 2.33 cardiovascular risk factors with a standard deviation of 0.92. 13.3% of patients were also on anti-coagulation, 6% had bleeding symptoms, and 6% were also on NSAIDs.

Conclusion:

Smoking (%)

6 (7.2)

27 (32.5)

50 (60.2)

Current

Former

Never

Minimizing bleeding risk in the elderly population will lead to reduced bleeding complications, improvement in quality of life, reduced pill burden, reduced ER visits and hospitalizations due to increased bleeding risk and reduced mortality from major bleeding episodes. Our findings show that there is a significant proportion of patients over the age of 70 who are still routinely prescribed low-dose aspirin as a primary prevention strategy. Additionally, there were instances where lowdose aspirin was prescribed despite relative and absolute contraindications against its use (see Table 1). For the future, our study could benefit from augmentation with a quality improvement component in the future.

References

¹2019 ACC/AHA Guideline on the Primary Prevention of Cardiovascular Disease. Donna K. Arnett, Roger S. Blumenthal, Michelle A. Albert, Andrew B. Buroker, Zachary . Goldberger, Ellen J. Hahn, Cheryl Dennison Himmelfarb, Amit Khera, Donald Lloyd-Jones, J. William McEvoy, Erin D. Michos, Michael Miedema, Daniel Muñoz, Sidney C. Smith, Salim S. Virani, Kim A. Williams, Joseph Yeboah, Boback Ziaeian. J Am Coll Cardiol. 2019 Sep, 74 (10) e177-e232.

T2DM (%)

25 (30.1)

58 (69.9)