

OUTCOMES OF LONG-TERM ASPIRIN USE ON PATIENTS WITH ASCENDING CHOLANGITIS UNDERGOING ERCP



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INTRODUCTION

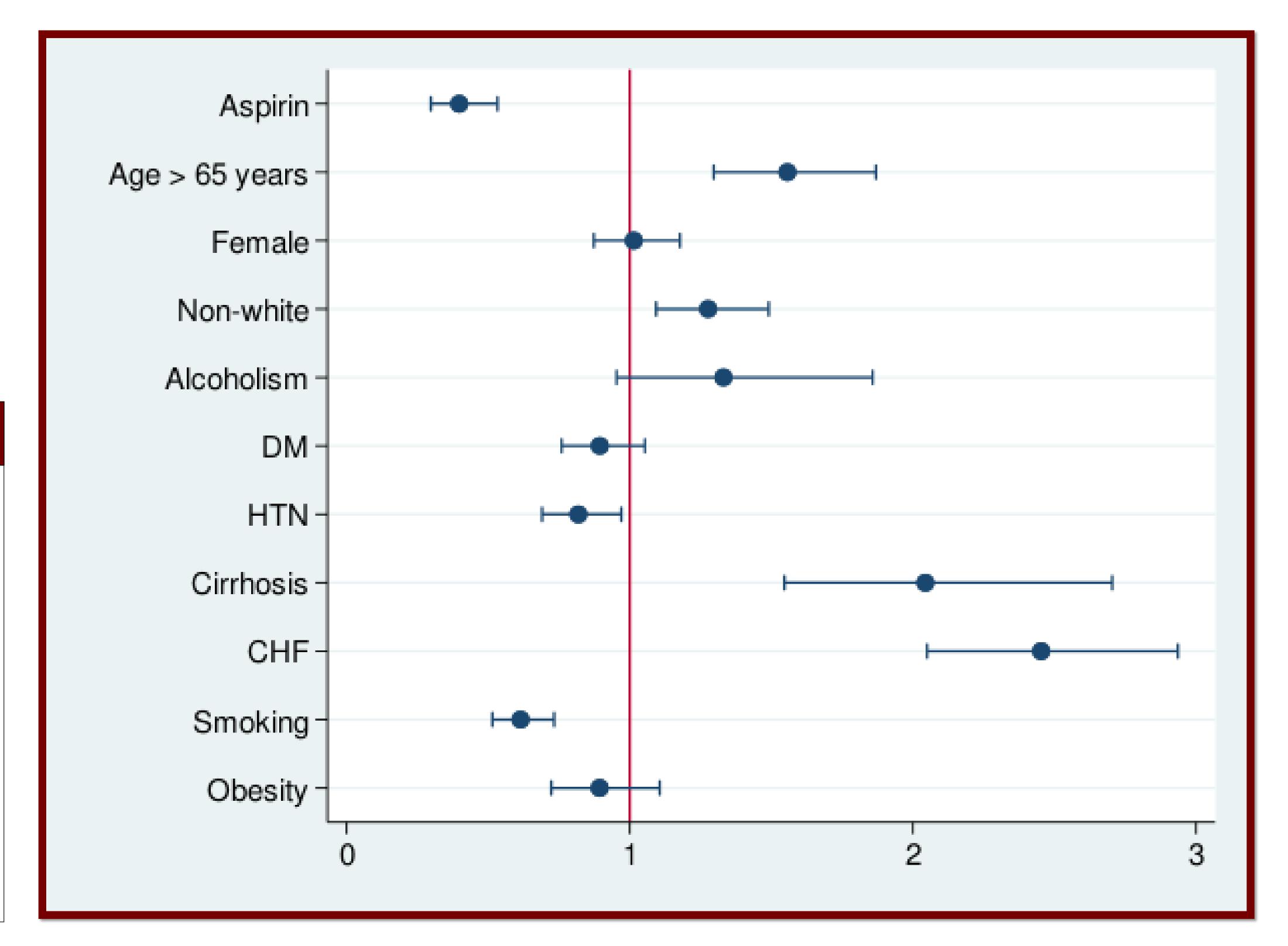
Endoscopic retrograde cholangiopancreatography (ERCP) has been shown to improve mortality and outcomes in patients with ascending cholangitis. However, it is associated with various complications, with hemorrhage being one of the most common. Management of antiplatelet agents in patients undergoing ERCP is challenging because interrupting these agents increases the risk of cardiovascular and cerebrovascular events, whereas it increases bleeding risk if continued. Various society guidelines recommend continuing aspirin use in patients undergoing ERCP. However, there remains a paucity of data and wide variation in clinical practice. We conducted the study to evaluate the effects of aspirin use in patients with ascending cholangitis undergoing ERCP.

Methods

Data were extracted from the National Inpatient Sample (NIS) database from 2016 to 2019. The CD-10-CM codes were used to obtain baseline demographic data, in-hospital mortality, hospital charges, and hospital length of stay (LOS). Statistical analyses were completed using t-test and Chi-squared analysis. Multivariate analysis for the mortality odds ratio (OR) was calculated after adjusting for possible confounders.

Results

A total of 105,840 patients with ascending cholangitis underwent ERCP, out of which 17,445 patients were on long-term aspirin. The mean age of the aspirin group was 74.5 years vs. 67 years in the non-aspirin group (p-value < 0.001). The majority of the aspirin group population were males and whites. Long-term aspirin use was associated with lower odds (OR 0.38; P< 0.001) and a lower incidence of mortality (1.38% vs. 3.38%, P< 0.001) compared to non-aspirin users. Patients on aspirin were also more likely to have a lower total hospital charge (\$73,507 vs. \$93,071; P< 0.001) and a shorter LOS (5.66 vs. 6.8 days; P< 0.001). Age greater than 65 years, non-white race, cirrhosis, and congestive heart failure were independently associated with higher mortality. Long-term aspirin use was also associated with lower odds of mechanical ventilation (OR 0.51), vasopressor use (OR 0.65), and ICU admission (0.53), all with a statistical significance of p-value < 0.001.



Conclusion

Aspirin has been shown to have other potential benefits as it may reduce the risk of certain malignancies and inflammatory diseases. Our study concluded that long-term Aspirin use is associated with a reduction in mortality, hospitalization complications, and length of stay in patients who are admitted with ascending cholangitis and undergoing ERCP.

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