OPEN ACCESS Freely available online

ISSN: 2167-0889
Journal of Liver

Opinion Article

Role of Antiplatelet Medications for Treatment of Hepatobiliary Disorders

Hwan Eunae*

Department of Hepatology, Chonnam National University Medical School, Gwangju, South Korea

DESCRIPTION

Antiplatelet drugs are medications that prevent blood clots from forming by stopping platelets from sticking together. Platelets are small blood cells that help form blood clots to stop bleeding when there is an injury. However, sometimes blood clots can form in the bloodstream and block the flow of blood to vital organs, such as the heart or brain. This can cause heart attack, stroke, or other serious complications. Antiplatelet drugs are commonly used to treat or prevent cardiovascular diseases, such as angina, coronary artery disease, heart attack, and stroke. They are also used in some surgical procedures, such as coronary artery bypass, angioplasty, or heart valve surgery, to reduce the risk of blood clots. However, antiplatelet drugs may also have a role in the management of liver and gall bladder diseases. Liver and gall bladder diseases are conditions that affect the liver or the gall bladder (a small organ that stores bile, a fluid that helps digest fats). Some examples of liver and gall bladder diseases are:

- Non-Alcoholic Fatty Liver Disease (NAFLD) is a condition where fat builds up in the liver, causing inflammation and scarring. NAFLD is associated with obesity, diabetes, high cholesterol, and high blood pressure. NAFLD can progress to non-alcoholic steatohepatitis (NASH), which is a more severe form of liver damage that can lead to cirrhosis (scarring and hardening of the liver) or liver cancer.
- In Cholelithiasis condition where stones form in the gall bladder or the bile ducts (tubes that carry bile from the liver to the gall bladder and the intestine). These stones can cause pain, inflammation, infection, or blockage of the bile flow. Cholelithiasis can lead to cholecystitis (inflammation of the gall bladder), cholangitis (infection of the bile ducts), or pancreatitis (inflammation of the pancreas).
- Primary biliary cholangitis (PBC) is a rare autoimmune disease where the immune system attacks the bile ducts in the liver, causing inflammation and scarring. PBC can lead to cirrhosis, portal hypertension (high blood pressure in the vein that carries blood from the digestive organs to the liver), or liver failure.

Antiplatelet drugs may have beneficial effects on liver and gall bladder diseases by reducing inflammation, fibrosis (scarring), and oxidative stress (damage caused by free radicals) in these organs. Antiplatelet drugs may also improve blood flow and oxygen delivery to the liver and gall bladder, which can enhance their function and regeneration. Some studies have suggested that antiplatelet drugs may lower the risk or severity of advanced liver fibrosis in patients with NAFLD1. Antiplatelet drugs may also reduce the risk of cholelithiasis by preventing platelets from sticking to cholesterol crystals in bile. Furthermore, antiplatelet drugs may improve survival and quality of life in patients with PBC by preventing thrombosis (blood clots) in the portal vein or its branches.

The most commonly used antiplatelet drug is aspirin, which inhibits an enzyme called Cyclooxygenase (COX) that produces substances called prostaglandins that promote platelet aggregation and inflammation. Aspirin can be taken daily at a low dose (75 mg-325 mg) to prevent cardiovascular events. The main side effect of antiplatelet drugs is bleeding, which can range from minor bruising to life-threatening hemorrhage. The risk of bleeding is higher in patients who have a history of bleeding disorders, ulcers, or recent surgery or trauma. The risk of bleeding is also increased when antiplatelet drugs are combined with other drugs that affect blood clotting, such as anticoagulants (blood thinners), Non-Steroidal Anti-Inflammatory Drugs (NSAIDs), or steroids. Patients who take antiplatelet drugs should inform their healthcare providers about their medical history and all the medications and supplements consuming. They should also follow the instructions on how to take the drugs, such as when to take them, how much to take, and whether to take them with or without food.

CONCLUSION

Antiplatelet drugs are medications that prevent blood clots from forming by stopping platelets from sticking together. They are mainly used to treat or prevent cardiovascular diseases, but they may also have a role in the management of liver and gall bladder diseases. Antiplatelet drugs may reduce inflammation, fibrosis, and oxidative stress in these organs and improve blood flow and

Correspondence to: Hwan Eunae, Department of Hepatology, Chonnam National University Medical School, Gwangju, South Korea, E-mail: euna@cho.com

Received: 03-Jul-2023, Manuscript No. JLR-23-22810; **Editor assigned:** 06-Jul-2023, Pre QC No. JLR-23- 22810 (PQ); **Reviewed:** 19-Jul-2023, QC No JLR-23-22810; **Revised:** 26-Jul-2023, Manuscript No. JLR-23- 22810 (R); **Published:** 02-Aug-2023, DOI: 10.35248/2167-0889.23.12.189

Citation: Eunae H (2023) Role of Antiplatelet Medications for Treatment of Hepatobiliary Disorders. J Liver. 12:189.

oxygen delivery. They should also avoid alcohol and grapefruit juice, which can interact with some antiplatelet drugs. However, antiplatelet drugs also have a risk of bleeding and other side effects that require careful monitoring and adjustment.