

Is Aspirin the Target of a Discrediting Campaign?

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STORY AT-A-GLANCE

- > For decades, a daily regimen of low-dose so-called "baby aspirin" (81milligrams), was recommended to prevent and treat heart attack, stroke and angina (chest pain) in those 50 and older
- > That began to change in 2014, when the U.S. Food and Drug Administration started warning against the use of aspirin as a primary preventive for these conditions. In late 2021, the United States Preventive Services Task Force (USPSTF) also updated its guidance to formally discourage people 60 and older from using an aspirin regimen to prevent a first heart attack or stroke
- Aspirin is likely the victim of an intentional pharma discrediting campaign to justify and promote the use of newer, patented and far more expensive nonsteroidal antiinflammatory drugs (NSAIDs) and anticoagulants
- > Research has shown aspirin works just as well as pricier anticoagulants such as heparin and Xarelto for preventing post-operative blood clots and clots associated with bone fractures
- Aspirin also increases the oxidation of glucose as fuel, and has anti-lipolytic effects, so it helps lower both the supply of dangerous omega-6 fat to your cells and the excessive oxidation of fats. Aspirin will also lower your baseline cortisol, indirectly by lowering inflammation, and directly by inhibiting the enzyme that synthesizes active cortisol from the inactive precursor cortisone

There are many instances in which a perfectly safe and effective medicine has become the target of an unjustified discrediting campaign in order to push newer patented (and hence profitable) drugs to the forefront. Ivermectin and hydroxychloroquine are by now two well-known examples. Long before that, however, there was a concerted effort to discredit aspirin.

Aspirin (acetylsalicylic acid) was introduced in 1899 as an alternative to sodium salicylate, a pain reliever and anti-inflammatory known for its unpleasant side effects such as stomach cramps, heartburn, nausea and vomiting. It's been a staple medicine in most households ever since, and is frequently recommended as a remedy to control inflammation and prevent blood clots.

The Changing Stance on Aspirin

For decades, a daily regimen of low-dose so-called "baby aspirin" (81 milligrams), was recommended to prevent and treat heart attack, stroke and angina (chest pain) in those 50 and older. Pharma started attacking aspirin in the 1970s when the nonsteroidal anti-inflammatory drugs (NSAIDs) were introduced as patented far more expensive, but not more effective alternatives.

The discrediting campaign increased in 2014, when the U.S. Food and Drug Administration started warning against the use of aspirin as a primary preventive for these conditions in those with no history of cardiovascular disease, due to potential side effects and the lack of data to support its use.²

In late 2021, the United States Preventive Services Task Force (USPSTF), a physician group that issues guidance for medical best practices, also updated its guidance to formally discourage people 60 and older from using an aspirin regimen to prevent a first heart attack or stroke.³

According to the USPSTF, "the chance of internal bleeding increases with age," so "the potential harms of aspirin use cancel out the benefits in this age group." USPSTF

member Dr. John Wong, interim chief scientific officer and professor of medicine at Tufts Medical Center, told ABC News:⁴

"People who are 40 to 59 years old and don't have a history of cardiovascular disease but are at higher risk may benefit from starting to take aspirin to prevent a first heart attack or stroke. It's important that they decide together with their healthcare professional if starting aspirin is right for them because daily aspirin does come with possible serious harms."

Dr. Steven Nissen, a cardiologist at the Cleveland Clinic, added:

"It is important for the public to understand that for the vast majority of Americans without pre-existing heart disease, aspirin does not provide a net benefit. The harms are approximately equal to any benefits. The USPSTF is just catching up with this widely accepted scientific viewpoint. For nearly 20 years the FDA has advised against routine use of aspirin for prevention in patients without heart disease."

As of December 2019, the FDA's website warns that "Every prescription and over-the-counter medicine has benefits and risks — even such a common and familiar medicine as aspirin. Aspirin use can result in serious side effects, such as stomach bleeding, bleeding in the brain, and kidney failure. No medicine is completely safe."

An Unjustified Discrediting Campaign

While I cannot prove it, I suspect aspirin has been (and still is) the target of a discrediting campaign for the simple reason that it competes with newer, far more expensive blood thinners and pain relievers.

Non-steroidal anti-inflammatory drugs (NSAIDs) hit the market in the 1970s, and aspirin needed to be downplayed to justify these expensive patented drugs. That's still the case today. It's also competing against pricey anticoagulants such as Xarelto (rivaroxaban) and Eliquis (apixaban).

The average retail price for a monthly supply of Eliquis or Xarelto is around \$550. A month's supply of generic heparin is about \$30, and warfarin (another generic) is around \$19.5 Meanwhile, you can pick up a bottle of 300 baby aspirins, a 10-month supply, for less than \$15. That's a monthly cost of \$1.50,6 and I cannot think of any reliable anticoagulant drug that sells for less than that.

I've not been a promoter of routine aspirin use for the simple reason that there are other, even safer alternatives. Fibrinolytic enzymes, for example, are a good alternative for heart-related issues like thrombosis, stroke and heart disease. That said, I believe the vilification of aspirin is likely unjustified, especially if you're comparing it to other, far more costly and potentially hazardous drugs that won't give you better results.

Aspirin Matches Performance of Heparin

For example, in 2013, a randomized, controlled multicenter trial⁷ comparing hip replacement outcomes among patients who received either aspirin or heparin found there were no disadvantages to using aspirin.

After receiving heparin prophylaxis for 10 days directly after surgery, 778 patients were randomly assigned to receive heparin for another 28 days or low-dose aspirin (81 mg) for the same length of time. As reported by HealthDay News:8

"Aspirin appears to be just as good as more expensive, more potent bloodthinning medication for preventing blood clots after hip replacement surgery ... The investigators found the two medications were similarly effective and safe. Where the medicines differ significantly is in cost.

'Low-molecular-weight heparin and the newer blood thinner, Xarelto, are similarly priced; they're several hundred-fold more expensive than aspirin,' said the study's lead author, Dr. David Anderson, a professor and head of the department of medicine at Dalhousie University in Halifax, Nova Scotia.

'Given the low cost of aspirin and its convenience, it's a reasonable alternative to low-molecular-weight heparin when used in the manner designed in this trial,'

said Anderson.

Five people on dalteparin [heparin] and one on aspirin developed a blood clot. The absolute difference between the two therapies was 1%. Bleeding events serious enough to require treatment occurred in five people on dalteparin, and two on aspirin.

Anderson said the difference in bleeding events wasn't statistically significant, but there was a trend toward aspirin being the safer alternative ... 'If aspirin turns out to be as good as Xarelto, given the number of joint [replacement] surgeries done in North America, it could save the health care system millions if it's proven to be at least as effective,' said Anderson."

Aspirin Matches Performance of Xarelto

Five years later, in 2018, Anderson followed up with a second, larger study, comparing aspirin to the more expensive Xarelto in hip or knee replacement patients. This time, patients received Xarelto (10 mg) for five days after the surgery before being randomly assigned to continue taking Xarelto or switching to low-dose aspirin for an additional nine days in the case of knee replacement or 30 days after hip replacement.

All were followed for 90 days for symptomatic venous thromboembolism, which was the primary effectiveness outcome, and bleeding complications, which was the primary safety outcome. As before, there was hardly a difference between the two groups:¹⁰

"A total of 3424 patients (1804 undergoing total hip arthroplasty and 1620 undergoing total knee arthroplasty) were enrolled in the trial. Venous thromboembolism occurred in 11 of 1707 patients (0.64%) in the aspirin group and in 12 of 1717 patients (0.70%) in the rivaroxaban group (difference, 0.06 percentage points; 95% confidence interval ...)

Major bleeding complications occurred in 8 patients (0.47%) in the aspirin group and in 5 (0.29%) in the rivaroxaban group (difference, 0.18 percentage points; 95% CI ...) Clinically important bleeding occurred in 22 patients (1.29%)

in the aspirin group and in 17 (0.99%) in the rivaroxaban group (difference, 0.30 percentage points; 95% Cl ...)

CONCLUSIONS: Among patients who received five days of rivaroxaban prophylaxis after total hip or total knee arthroplasty, extended prophylaxis with aspirin was not significantly different from rivaroxaban in the prevention of symptomatic venous thromboembolism."

Aspirin as Effective as Heparin After Bone Fractures

Fast-forward another five years, to January 2023, and we have yet another, and even larger, trial^{11,12,13,14} comparing aspirin with injectable heparin. This time, they compared outcomes in 12,211 patients hospitalized for bone fractures. As in post-surgical patients, blood clots are a potentially lethal complication when you fracture a bone, which is why they routinely receive some kind of anticoagulant.

Half the patients were randomly assigned to receive 30 mg of injectable low molecularweight heparin twice a day. The other half received 81 mg of inexpensive oral aspirin twice a day. Patients were followed for 90 days, and, as in previous trials, over-thecounter baby aspirin performed just as well as the costlier heparin.

66 An estimated one million Americans are hospitalized each year with extremity fractures, and this new finding could help prevent potentially fatal blood clots in these patients using a medication that is cheaper and far easier to administer. ~ Dr. Mark T. Gladwin?

In a press release, University of Maryland Medical Center reported:15

"This multidisciplinary collaboration between orthopedic surgeons and trauma surgeons points to the importance of evaluating techniques used to prevent

post-surgical complications, like blood clots and infections, through highquality, head-to-head comparison studies ...

'Many patients with fractures will likely strongly prefer to take a daily aspirin over receiving injections after we found that both give them similar outcomes for prevention of the most serious outcomes from blood clots,' said the study's principal investigator Robert V. O'Toole, MD ... 'We expect our findings from this large-scale trial to have an important impact on clinical practice that may even alter the standard of care' ...

The main finding of the study was that aspirin was 'non-inferior,' or no worse than low molecular-weight heparin in preventing death from any cause — 47 patients in the aspirin group died, compared with 45 patients in the heparin group.

For other important complications, the researchers also found no differences between the two groups in clots in the lungs (pulmonary embolisms). The incidence of bleeding complications, infection, wound problems, and other adverse events from the treatments was also similar in both groups.

Of all the outcomes studied, the only potential difference noted was in blood clots in the legs, called deep vein thrombosis. This condition was relatively uncommon in both groups as it occurred in 2.5 percent of patients in the aspirin group, and in 1.7 percent of patients in the heparin group.

'This relatively small difference was driven by clots lower in the leg, which are thought to be of less clinical significance and often do not require treatment,' said study co-principal investigator Deborah Stein, MD, MPH ..."

Health Care System Can Save Many Millions Each Year

Dr. Mark T. Gladwin, vice president for medical affairs at the University of Maryland, commented on the findings:¹⁶

"An estimated one million Americans are hospitalized each year with extremity fractures, and this new finding could help prevent potentially fatal blood clots in these patients using a medication that is cheaper and far easier to administer.

Given these important results, we can expect the guidelines for the prevention of blood clots to be revised to include the option of aspirin for patients with traumatic bone fractures."

Aspirin Has Other Health Benefits Too

In addition to being an effective pain reliever, anti-inflammatory and anticoagulant (blood thinner), aspirin also has other health benefits. Importantly, it helps increase the oxidation of glucose as fuel for your body while inhibiting the oxidation of fatty acids, specifically linoleic acid.

As I've mentioned many times before, one of the most foundational strategies to improve your health is to lower your linoleic acid intake, but since you're always going to get some from your food, and linoleic acid remains in your cellular membranes for up to seven years, a daily low-dose aspirin regimen may help prevent some of the damage in the meantime.

Aspirin also has an anti-lipolytic effect, so it helps lower both the supply of fat to the cell and the excessive oxidation of fats.

Aspirin will also lower your baseline cortisol, indirectly by lowering inflammation, and directly by inhibiting the enzyme 11-beta-hydroxysteroid dehydrogenase Type 1. This enzyme synthesizes active cortisol from the inactive precursor cortisone.

Purchasing Guidelines

While picking out aspirin might seem like an easy thing to do, there are, in fact, some important considerations to keep in mind. First, avoid coated extended-release aspirin. It's not recommended due to the additives they put in it. There is a pure aspirin powder

that you can purchase for around \$20. Typically one would use around one quarter teaspoon once a day with food.

If you are sensitive to aspirin it would be best to use a salicylic acid or willow bark supplement, as this is the active ingredient. Look for a clean, high quality willow bark supplement.

Interestingly aspirin was developed as an alternative to salicyclic acid so it could be patented. The active ingredient is salicylic acid not acetyl salicylic acid. When you consume aspirin it is metabolized in your body to salicylic acid, which is the compound responsible for the anti-inflammatory and pain-relieving effects of aspirin.

Sources and References

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