IBUPROFEN and LEAKY GUT

Why ibuprofen isn't necessarily safer than acetaminophen (Tylenol)

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My objection to ibuprofen is that it increases intestinal permeability. This effect is more severe in people with Crohn's disease and their relatives, but it occurs in most people. The following explains what permeability is, and why it is a huge problem when it is increased.

What is intestinal permeability?

If you think about it, we are shaped like a really tall donut. Our mouth is in contact with the outside world, and this outside world continues right through our throat, esophagus, stomach, small and large intestine all the way to the anus. Thus, apart from the skin, the other barrier between "us" and the "outside world" is the lining of the gut.

However this barrier has two contradictory functions: one is to absorb nutrients from food. The other is to keep us safe from unwanted substances.

It turns out that this barrier isn't always as good as we hope. There are many people with increased intestinal permeability, a.k.a. "leaky gut". In these people, substances from the food leak into the inside of the blood vessels that line the gut, and end up in our bloodstream.

Why is leaky gut a problem?

What substances in food could be harmful? The point is to first digest the food, and then bring nutrients into the bloodstream. The protein should be fully broken down into amino acids, the fat into fatty acids, and the complex carbohydrates into sugars. Bacteria that live on or in the food (or in the intestine) should be kept out of the bloodstream. Anything that doesn't belong in the bloodstream, either something that isn't broken down properly, or a microbe, of course, will trigger an immune response. This immune response is called inflammation. So you would expect people with increased intestinal permeability to have increased inflammation too.

Crohn's Disease and Leaky Gut

Gastroenterologists have been studying leaky gut for decades. In the 1990s, they published articles on the fact that Crohn's disease involves leaky gut. It's actually very interesting: not only do they have leaky gut, but they also have an exaggerated response to ibuprofen. It causes an increase in permeability beyond what you see in people without Crohn's disease. First degree relatives of people with Crohn's also

have this exaggerated response to ibuprofen. Wives of people with Crohn's disease have increased leaky gut, but no exaggerated response to ibuprofen. So leaky gut can be a result of genetics, environment, or the interaction of the two.

Crohn's disease affects 2 per 1,000 Americans, and its incidence is rising. The incidence in kids is rising especially quickly. It is believed that because of permeability, bacteria that normally live in the gut (probiotic bacteria) seep into the bloodstream and elicit an immune response. What happens next is that the body begins to attack the probiotic bacteria, causing many problems. This is why you can predict an attack of Crohn's is coming by noticing when the leaky gut gets worse.

Other Diseases Associated with Leaky Gut

It would be bad enough if Crohn's was the only disease related to leaky gut, but it's not. Irritable bowel disease, which affects 14% of Americans, is also related to leaky gut. Studies also suggest more associations, between leaky gut and eczema, asthma, food allergies and environmental allergies, rheumatoid arthritis, other autoimmune diseases, and who knows what else. The understanding here is that dietary proteins that are absorbed through the leaky intestinal membrane before being fully broken down (because the membrane is leaky and lets through larger molecules than it should) trigger an immune response which is ultimately connected to the disease in question.

This understanding has been commonplace in the world of naturopathy, for example, but isn't well accepted by conventional physicians. If you go see a rheumatologist for an autoimmune disease, he or she will not mention leaky gut. I'm not sure a gastroenterologist would mention it, even though it's such a central problem in the system they specialize in, the intestinal tract. I think this is because there isn't a medication for it. In functional medicine, we use a variety of approaches to repair the gut, including herbs, food avoidance and the amino acid glutamine.

Conclusion

So once again, as for acetaminophen, I believe that it would be prudent, if one wanted to be careful and not take chances with one's health, to avoid ibuprofen and its relatives (Aleve contains naproxen; Aspirin contains acetylsalicylic acid; the others are prescription, I believe) unless absolutely necessary.

Other things that increase intestinal permeability include stress, certain foods like added sweeteners, and certain microbes. Gut repair involves removing the offenders, supporting the natural healing of the intestine, making sure there are enough beneficial bacteria, and readjusting the body's stress response.

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