



DRUG INTERACTIONS AND THE HEART

In clinical research we test a new drug under a controlled and closely monitored setting. When the drug gets approved for general use the same safeguards are not in place, and many new drugs have subsequently been restricted or taken off the market because of drug to drug interactions.

In cardiology we see many different types of drug interactions. One of the most common is related to the use of a blood thinner warfarin. This drug interacts with many medications including aspirin, anti-inflammatories, vitamin E, vitamin K rich foods, and fish oil supplements. Use of these agents in combination can result in either the blood becoming too thin or too thick.

Another common drug interaction is related to pain medications. While acetaminophen (Tylenol) is considered the safest, it is metabolized in the liver and excessive use can affect liver function and therefore impact the level of other drugs. Many patients use nonsteroidals (NSAID's) for treatment of headaches, cramps and arthritis. All NSAIDs increase the risk of heart attacks and strokes. They can also raise blood pressure and cause fluid retention. The safest of the NSAIDs is naproxen and whenever possible should be used instead of another common over-the-counter NSAID, ibuprofen, in patients with heart disease.

Drug interactions can also cause rhythm disturbances of the heart. Many drugs prolong the QT interval on an electrocardiogram. This can increase the risk of fainting or even sudden death. Individuals who are put on multiple drugs that prolong the QT interval should have an EKG done on a regular basis.

To reduce your risk here are some general guidelines to observe.

- 1.** Always ask your doctor why a specific medication has been prescribed, how long it needs to continue and what are potential side effects and drug interactions.

- 2.** Most drugs are metabolized in the liver and excreted either through the liver or kidneys. As a result any impairment of your liver or kidneys increases your potential for a drug interaction. A simple blood test can often confirm that these organs are functioning normally.

- 3.** When a new drug or herbal supplement is added to existing meds please review with your doctor or pharmacist for potential drug interactions. Many websites can also provide this information but are unable to put it into context. Some interactions are mild and the net clinical benefit favors using both products.

- 4.** Always keep an up to date list of your medications, including supplements, and provide this to any health care professional who will be prescribing another medication.

- 5.** If you are feeling unwell upon initiating a new drug, contact your doctor immediately, but do not stop the drug suddenly without reviewing potential alternatives and implications.

- 6.** Minimize the number of drugs and supplements you are taking. Continue only those that are essential to improve the quality or longevity of your life.

Taking multiple medications and supplements can go a long way towards healing our bodies. However it is up to all of us to ensure that we choose a combination that is safe and sensible.



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