



Importance of Non-Steroidal Anti-Inflammatory Drugs

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DESCRIPTION

Non-steroidal anti-inflammatory drugs (NSAIDs) are used chronically to reduce pain and inflammation in patients with arthritic conditions, and also acutely used as analgesics by many patients. Both therapeutic and adverse effects of NSAIDs are due to inhibition of Cyclooxygenase (COX) enzyme. NSAIDs are classified as non-selective and COX-2-Selective Inhibitors (COXIBS) based on their extent of selectivity for COX inhibition. However, regardless of their COX selectivity, reports are still appearing on the side effect of NSAIDs particularly on the lower Gastro Intestinal (GI) tract and the harmful role of their controlled release formulations. Presently, the major side effects of NSAIDs are the GI complications, renal disturbances and Cardio Vascular (CV) events. There is a tendency to believe that all NSAIDs are associated with renal and CV side effects, a belief that is not supported by solid evidence. Prostaglandins are hormone-like chemicals in the body that contribute to inflammation, pain and fever by raising temperature and dilating blood vessels, which causes redness and swelling in the place they are released.

NSAIDs block a specific enzyme called cyclooxygenase (COX) used by the body to make prostaglandins. By reducing production of prostaglandins, NSAIDs help relieve the discomfort of fever and reduce inflammation and the associated pain. NSAIDs (with the exception of low-dose aspirin) may also increase the risk of heart attack and stroke, even in healthy people. In general, using NSAIDs occasionally rather than every day, and at the lowest dose possible, reduces chances of developing serious side effects. If a person is concerned or unsure about risk of side effects with NSAIDs, talk to doctor or pharmacist. Take paracetamol for mild to moderate pain and fever before a NSAID as it has fewer adverse effects, unless a person have been advised otherwise by health professional. A topical NSAID (cream, gel or ointment) may provide enough

relief from muscle and joint pain and inflammation, or relieve discomfort caused by strains or sprains. If a topical NSAID does not provide relief from pain in the first instance, consider taking an oral NSAID. While NSAIDs can potentially cause many side effects some of which may be serious or life-threatening if not prescribed under the right conditions and used as instructed, they can be of great benefit. Doctor can help to consider the benefits and risks of taking an NSAID to ensure they're the right treatment option. When a person is taking an NSAID, always use it cautiously, for the shortest time possible and at the lowest effective dose. If a person need to use these medicines for long time (for example, to manage the symptoms of arthritis when other therapies don't offer relief, or when a person is taking low-dose aspirin to prevent a heart attack or stroke), make sure to consult doctor regularly. Do not take NSAIDs if a person is dehydrated as the person may be more likely to experience side effects. Drug interactions with NSAIDs may interact with other medicines to cause unwanted effects. For example: When combined with blood-thinning medicines (such as warfarin) NSAIDs increase the risk of bleeding. NSAIDs can cause kidney failure when they are combined with medicines used to treat heart problems and high blood pressure and diuretics (medicines to remove excess fluid). NSAIDs can oppose the effects of medicines for heart failure and high blood pressure and stop them working effectively, including beta blockers and diuretics. When combined with another type of NSAID (including low-dose aspirin) or with a corticosteroid medicine (for example, prednisolone) NSAIDs increase the risk of gastrointestinal ulceration or bleeding. Alcohol can irritate the stomach lining. Regular or more consumption of alcohol while taking NSAIDs may increase the risk of gastrointestinal damage or bleeding. If a person is taking another medicine, consult a doctor or health professional before taking a NSAID in case a person might be at risk of unwanted effects.

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