Patterns of Over-The-Counter Analgesic Use and Drug Interactions between Over-The-Counter Analgesics and Prescription Drugs

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SUMMARY. Over-the-counter (OTC) analgesics are widely used, and they can have interactions with prescription drugs. The purpose of this study was to assess patterns of OTC analgesic use and evaluate potential interactions between OTC analgesics and prescription drugs. The subjects of this study were patients who visited a local community pharmacy located in Chuncheon-si, Korea between January 10, and February 10, 2015. Data collection regarding the use of OTC analgesics was conducted during face-to-face interviews, and the list of drugs prescribed for each patient was reviewed using computerized pharmacy databases. This study evaluated the potential interactions between OTC analgesics and the listed prescription drugs using Lexi-Interact Data Fields. A total of 200 patients were interviewed. Among these patients, 162 (81%) take OTC analgesics (acetaminophen, ibuprofen, or naproxen) regularly; 93 (57%) out of these 162 patients were exposed to at least one interaction between OTC analgesics and prescription drugs. A total of 154 incidents of potential interactions between OTC analgesics and prescription drugs were observed. There were 34 interactions of risk rating B (no action needed), 94 interactions of risk rating C (monitor therapy), 18 interactions of risk rating D (consider therapy modification), and 8 interactions of risk rating X (avoid combination) based on Lexi-Interact Data Fields. A significant proportion of patients had potential interactions between OTC analgesics and prescription drugs they were taking, which may adversely influence the therapeutic outcomes of prescription drugs. Therefore, specific medication screening and counseling by pharmacists is required to prevent potential interactions between OTC analgesics and prescription drugs.

KEY WORDS: acetaminophen, analgesics, drug interactions, nonsteroidal anti-inflammatory drugs, over-the-counter medication.

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