

Investigation of over-the-counter drugs used during pregnancy and literature search of their components.

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Abstract

Objective

Over-the-counter drugs (OTCs) are frequently used in Japan and pregnant women sometimes use OTCs casually. However, few studies have reported the use of OTCs by pregnant women. Therefore, we conducted surveys the maternal drug use during pregnancy, and the data collected showed high frequency of OTCs use, especially cold medicines and antipyretic analgesics. So we analyzed the cases about the use of OTCs of pregnant women and the effects of cold medicines and antipyretic analgesics on pregnancy.

Method

We investigated the OTCs use of women who consulted the "Counseling Clinic of Pregnancy and Drugs" at St. Luke's International Hospital from May 2001 to March 2006 retrospectively. Appended papers of the prescribed drugs, Japana Centra Revuo Medicina Web and MEDLINE were used to research the possible effects of OTCs on pregnant women and the fetus.

Results

Of the 294 patients including male patients who consulted the clinic, 67 pregnant women used OTCs. The women used 93 OTCs, including 19 cold medicines and 18 antipyretic analgesics: 24 of these 37 OTCs contained harmful agents to animals and humans according to the appended papers. There were 40 components among the 37 OTCs. The result of the bibliographic search of the 40 components revealed that 8 substances (acetylsalicylic acid, acetaminophen, ibuprofen, methyl ephedrine hydrochloride, caffeine etc.) increased the risk of maternal or fetal adverse events and no such studies were reported concerning the other 32 components.

Conclusion

In this study, we showed 22.8% (67/294) of pregnant women took OTCs and they used cold medicine and antipyretic analgesics frequently, and the percentage is not negligible small. Our result of literature search showed that some components increased the risk of fetal and/or maternal adverse events, on the other hand the current information about the adverse effects of the components of OTCs on pregnancy is insufficient and there are some discrepant points in the contents of package inserts of these prescription medicines. We think it is important for medication during pregnancy to explain adverse events detailed referring clinical epidemiological study reports or case reports on the package inserts.

Key words: adverse reaction, drug information, OTC, pregnancy, safety