

## **A COMPARATIVE STUDY OF ANTIPYRETIC ACTIVITY OF ACETAMINOPHEN AND IBUPROFEN IN FEBRILE CHILDREN**

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### **Abstract**

Fever is the most common complaint of children seen in pediatric emergency department. Prolonged and high fever may cause various disturbances in children, and rapid lowering of fever is essential. Therefore, an appropriate treatment aimed at rapid lowering of fever and keeping the child afebrile is mandated. There have been various studies on different types of anti-pyretic treatment in children. OBJECTIVES: The aim of our study was to compare the antipyretic effect of acetaminophen and ibuprofen in treatment of febrile children. METHODS: One hundred febrile patients, age between two years to twelve years, who were admitted into casualty department at Al-Hashimiya General Hospital in Babylon in 2005, were randomly allocated into two groups consisting of 50 patients each. Acetaminophen (15 mg/kg/dose p.o) was administered to one group and ibuprofen (10 mg/kg/dose p.o) to the other. Body temperature for each patient was recorded initially before the administration of each drug; and subsequently at 30 min., 1, 2, 3, 4, 5 and 6 hours after the drug use. RESULTS: There was no significant difference between the antipyretic effect of acetaminophen and ibuprofen until the end of the 3rd hour. Both drugs lowered fever markedly and proved to be equally effective. However during the 4th ( $p < 0.05$ ), 5th ( $p < 0.05$ ), and 6th ( $p < 0.05$ ) hour after treatment, ibuprofen was more effective than acetaminophen. CONCLUSIONS: Both acetaminophen and ibuprofen proved to be effective antipyretic agents. The antipyretic effects of both drugs as well as their efficacies were the same, but the duration of action of ibuprofen was longer than acetaminophen.