

# An Observational Study Report on Adverse Drug Reactions of A Combination of Drugs in A Tertiary Care Hospital, Kolkata, West Bengal

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## ABSTRACT

**Background:** Drugs or proper medications can be a preventive measure against several temporary or chronic human diseases and physiological conditions. But sometimes, drugs can turn out to be a bane to human life rather than becoming a boon. Administration of certain drugs may lead to several undesirable detrimental effects to human health that may even be fatal if gone unnoticed. These reactions are more commonly referred to as the Adverse drug Reactions<sup>TM</sup>.

**Aim:** In the current study, our major aim is to probe the adverse drug reactions of two particular drugs Paracetamol and Cephalosporin, when administered in combination or separately in a tertiary care hospital, Kolkata, West Bengal.

**Material and methods:** Our study involves a hospital-based observational study where the adverse drug reactions reported by medical practitioners over a period of six months were assessed in patients administered with paracetamol and cephalosporin group of drugs in combination or separately.

**Results:** In this study, 100 patients were administered paracetamol and cephalosporin drug groups both separately or in combination. Out of them, 36 patients developed ADR like hepatotoxicity, hypotension, anemia, vomiting, skin rashes as well as Steven Johnson Syndrome. Adverse drug reaction is found to be more common in women than in men. Also, middle-aged adults (15-65 years) are more prone to adverse drug reactions on the administration of a combination of paracetamol and cephalosporin drugs. Further, when the patients were subjected to a dose of a combination of paracetamol and cephalosporin drug groups, they experienced mainly vomiting along with some minor cases of hypertension, hepatotoxicity, and skin rashes.

**Conclusion:** Our study clearly indicates that when a patient is co-administered a combination of both paracetamol and cephalosporin drug groups, the majority of the observed adverse drug reaction symptom is vomiting which is a signature adverse drug reaction symptom of cephalosporin drug group alone, indicating a clear predominance in symptoms of adverse drug reaction exhibited by cephalosporin drug group over paracetamol.

**Keywords:** Drugs; Adverse drug reactions; Paracetamol; Cephalosporins

## INTRODUCTION

In present-day to day life, human beings are completely dependent on drugs and medicines for better overall health. Drugs can give relief to several temporary as well as chronic long-standing health issues in human life. But in reality, the same drugs which can save millions of lives can lead to severe side effects or adverse reactions in several patients which can sometimes even lead to death [1,2]. According to a recent report, adverse drug reactions

turned out to be the 4<sup>th</sup> major cause of morbidity leading to deaths of about 2.5 lakhs of people every year [3]. One of the most well-known cases of 'Adverse drug reaction' was the adverse effects of Thalidomide [4,5]. Thalidomide captured the drug market as an attractive sedative and anti-emetic drug used for the treatment of morning sickness experienced by pregnant ladies. But soon, the drug was found to be the causative agent of peripheral neuropathy in patients as well as certain birth defects in newborn babies like Phocomelia [6]. Another notable example of adverse drug reaction

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