STUDY CONCERNING ADVERSE DRUG REACTIONS IN ADULT PATIENTS FROM SURGICAL WARDS IN A CLINICAL EMERGENCY HOSPITAL

DI-064

O.L. Filip[1], C.D. Calina[1], A. Docea[1], P. Mitrut[2], M.V. Bubulica[1], M. Balasoiu[2], A.F. Rosu[2], O. Zlatian[2], C. Bocsaru[1]

[1]University of Medicine and Pharmacy, Faculty of Pharmacy, Craiova, Romania.
[2]University of Medicine and Pharmacy, Faculty of Medicine, Craiova, Romania.

E-mail : calinadaniela@gmail.com

Universitatea de Medicina si Farmacie CRAIOVA, ROMANIA

BACKGROUND

One main objective of clinicians and hospital pharmacists is correct pharmacotherapy according to the pathological context of the inpatient.
One principle of pharmacotherapy is to minimise the risk of adverse drug reactions (ADRs). In surgical patients, therapy usually involves antibiotics, analgesics, antiinflammatory drugs and anticoagulants.

PURPOSE & AIMS

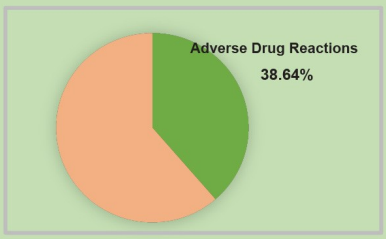
We aimed to determine the incidence and characteristics of ADRs to main medication used in surgical patients, during hospital admission. These data can be used by clinicians for implementing practices for safe drug use.

MATERIAL AND METHODS

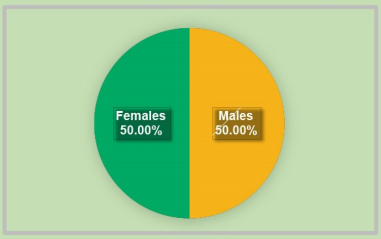
This prospective observational study was conducted between January and July 2015 in a clinical emergency hospital and included 376 patients (189 men and 189 women) who underwent surgery over a period of 7 months.
ADRs were identified by studying in real time the electronic patient records and directly from the clinicians who observed them.
The clinical pharmacist also recorded age, sex and drug usage prior to admission.

RESULTS

74 ADRs were observed in 68 patients (18%) during the admission period. 18 (26.43%) of the ADRs could have been prevented.
The most frequent ADRs were neurological (22, 31.92%), allergic (10, 15.03%,), gastrointestinal (9, 13.14%) and haematological (6, 8.76%).
The drug classes most frequently associated with the occurrence of ADRs were: antibiotics (30, 43.45%), non-steroidal anti-inflammatory drugs (9, 13.14%), glucocorticoids (9, 13.14%), anticoagulants (6, 8.7%) and diabetes mellitus agents (4 patients, 6.6%).

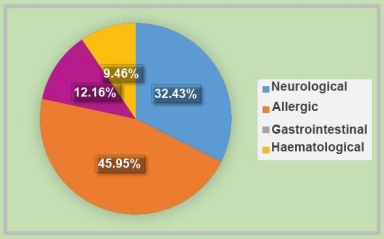


Prevalence of ADRs

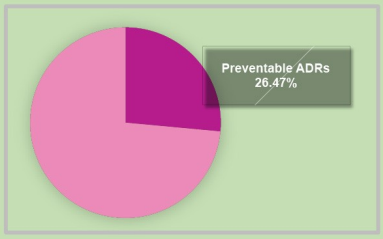


Sex distribution of study patients

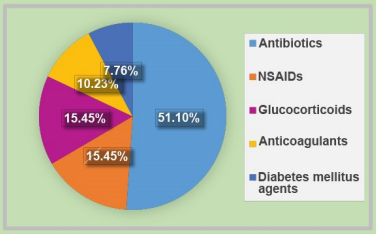
RESULTS



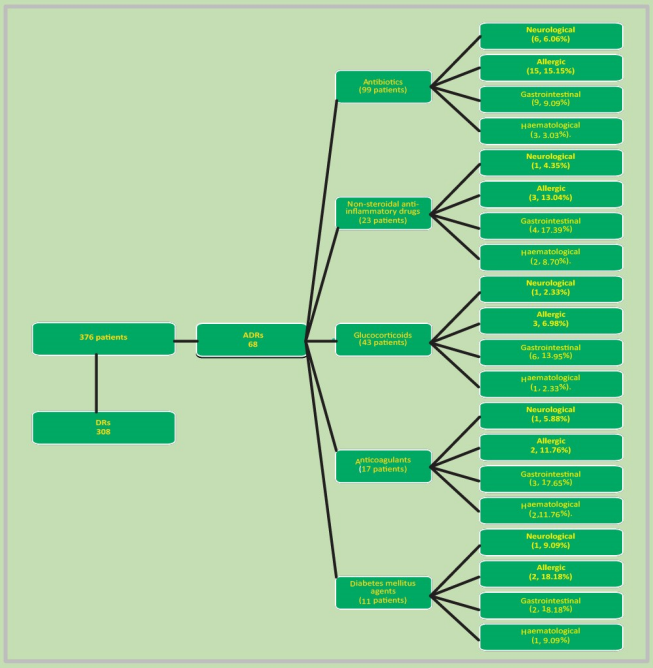
Types of ADRs



Preventable ADRs



Drugs involved in ADRs



The types of ADRs for every antibiotic class

CONCLUSIONS

The study showed a prevalence of ADRs of 18% in surgical patients, mostly neurological, followed by allergic. The very frequent ADRs to antibiotics compared with other studies can be explained by their use in virtually all surgical patients. Our preventable ADR rate of 26.43% was slightly higher that 15.4% reported in other studies1 due to incorrect conduct of the therapy. The only method to evaluate a drug is to assess the risk/ benefit ratio.