

# POTENTIAL DRUG-DRUG INTERACTIONS IN A GENERAL NEUROLOGY WARD

## Potencijalne interakcije između lekova kod pacijenata hospitalizovanih na neurološkom odeljenju



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**Uvod/Cilj.** Tretman neuroloških bolesti obično zahteva polifarmaciju, zato je važno otkriti potencijalne interakcije između lekova i prepoznati rizik na vreme jer posledice po pacijenta mogu biti ozbiljne. Cilj naše studije jeste da utvrdi između kojih lekova najčešće može doći do interakcija.

**Metode.** U studiju su bila uključena 144 pacijenta hospitalizovana na neurologiji Kliničkog centra Kragujevac. Studija je imala retrospektivni kohortni dizajn. Frekvencija različitih tipova interakcija uočavana je uz pomoć internet čekera interakcija (Medscape, Epocrates i Micromedex).

**Rezultati.** Najčešće lek-lek interakcije na odeljenju neurologije:

**Introduction.** Treatment of neurological diseases usually requires polypharmacy, and it is crucial to detect potential drug-drug interactions (DDIs) and recognize risk factors in timely manner, as consequences of DDIs could be serious. The aim of our study was to determine which drugs can most often interact.

**Methods.** This study was conducted in 144 inpatients in general-care neurological department of a tertiary care hospital. The study had retrospective cohort design. Frequencies of various types of potential DDIs (according to severity) discovered by Medscape, Epocrates and Micromedex online interaction checkers.

**Results.** The most common drug-drug interaction in general neurology ward:

Lekovi	Tip lek-lek interakcija		
	Medscape	Epocrates	Micromedex
Acetilsalicilna kiselina i ketorolac	Kontraindikovano	Kontraindikovano	Kontraindikovano
Diklofenak i ketorolac	Kontraindikovano	Izbegavati-KA*	Kontraindikovano
Acetilsalicilna kiselina i fosinopril	Ozbiljno-KA*	Pratiti/Korigovati	Umereno
Acetilsalicilna kiselina i enalapril	Ozbiljno-KA*	Pratiti/Korigovati	Umereno
Acetilsalicilna kiselina i ramipril	Ozbiljno-KA*	Pratiti/Korigovati	Umereno
Acetilsalicilna kiselina i ibuprofen	Ozbiljno-KA*	Izbegavati-KA*	Teško
Ketorolac i ramipril	Ozbiljno-KA*	Pratiti/Korigovati	Umereno
Ketorolac i perindopril	Ozbiljno-KA*	Pratiti/Korigovati	Umereno
Diklofenak i enalapril	Ozbiljno-KA*	Pratiti/Korigovati	Umereno
Diklofenak i kvinapril	Ozbiljno-KA*	Pratiti/Korigovati	Umereno
Ibuprofen i ramipril	Ozbiljno-KA*	Pratiti/Korigovati	Umereno

\*KA-Koristiti alternative

**Zaključak.** Učestalost potencijalnih interakcija između lekova kod pacijenata na neurologiji je značajna, stoga treba biti oprezan pri propisivanju lekova naročito nesteroidnih antiinflamatornih lekova i ACE inhibitora.

Drugs	Type of drug drug interactions		
	Medscape	Epocrates	Micromedex
Acetylsalicylic acid and ketorolac	Contraindicated	Contraindicated	Contraindicated
Diclofenac and ketorolac	Contraindicated	Avoid-UA	Contraindicated
Acetylsalicylic acid and fosinopril	Serious-UA	Monitor/Modify	Moderate
Acetylsalicylic acid and enalapril	Serious-UA	Monitor/Modify	Moderate
Acetylsalicylic acid and ramipril	Serious-UA	Monitor/Modify	Moderate
Acetylsalicylic acid and ibuprofen	Serious-UA	Avoid-UA	Major
Ketorolac and ramipril	Serious-UA	Monitor/Modify	Moderate
Ketorolac and perindopril	Serious-UA	Monitor/Modify	Moderate
Diclofenac and enalapril	Serious-UA	Monitor/Modify	Moderate
Diclofenac and quinapril	Serious-UA	Monitor/Modify	Moderate
Ibuprofen and ramipril	Serious-UA	Monitor/Modify	Moderate

\*UA-use alternative

**Conclusion.** The frequency of potential drug interactions in patients in neurology is significant and caution should be exercised when prescribing drugs, especially non-steroidal anti-inflammatory drugs and ACE inhibitors.