

EVALUATION OF THE PRESCRIPTION OF INTRAVENOUS NON-STEROIDAL ANTI-INFLAMMATORY DRUGS COMPARED TO THE RECOMMENDATIONS OF THE SUMMARY OF PRODUCT CHARACTERISTICS

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Background

Acute renal failure is a side effect of NSAIDs.

Purpose

To assess the appropriateness of the intravenous prescription of dexketoprofen according to the dosage specifications depending on renal function following the recommendations of the summary of product characteristics.

Materials and Methods

An observational, retrospective study that analyzed dexketoprofen prescriptions in surgical patients admitted to a tertiary hospital from January-September 2011.

The estimated glomerular filtration rate (eGF) was calculated by the CKD-EPI formula, of reference in the hospital.

The summary of product characteristics advises using the following posology for dexketoprofen:

- ❖ 150mg maximum daily dose for a maximum duration of 48 hours.
- ❖ In patients with renal impairment:
 - GF <50mL/min: administration contraindicated.
 - GF 50-80mL/min: 25 mg/12h. Maximum: 50 mg daily.
 - GF >80mL/min: No dosage adjustment required

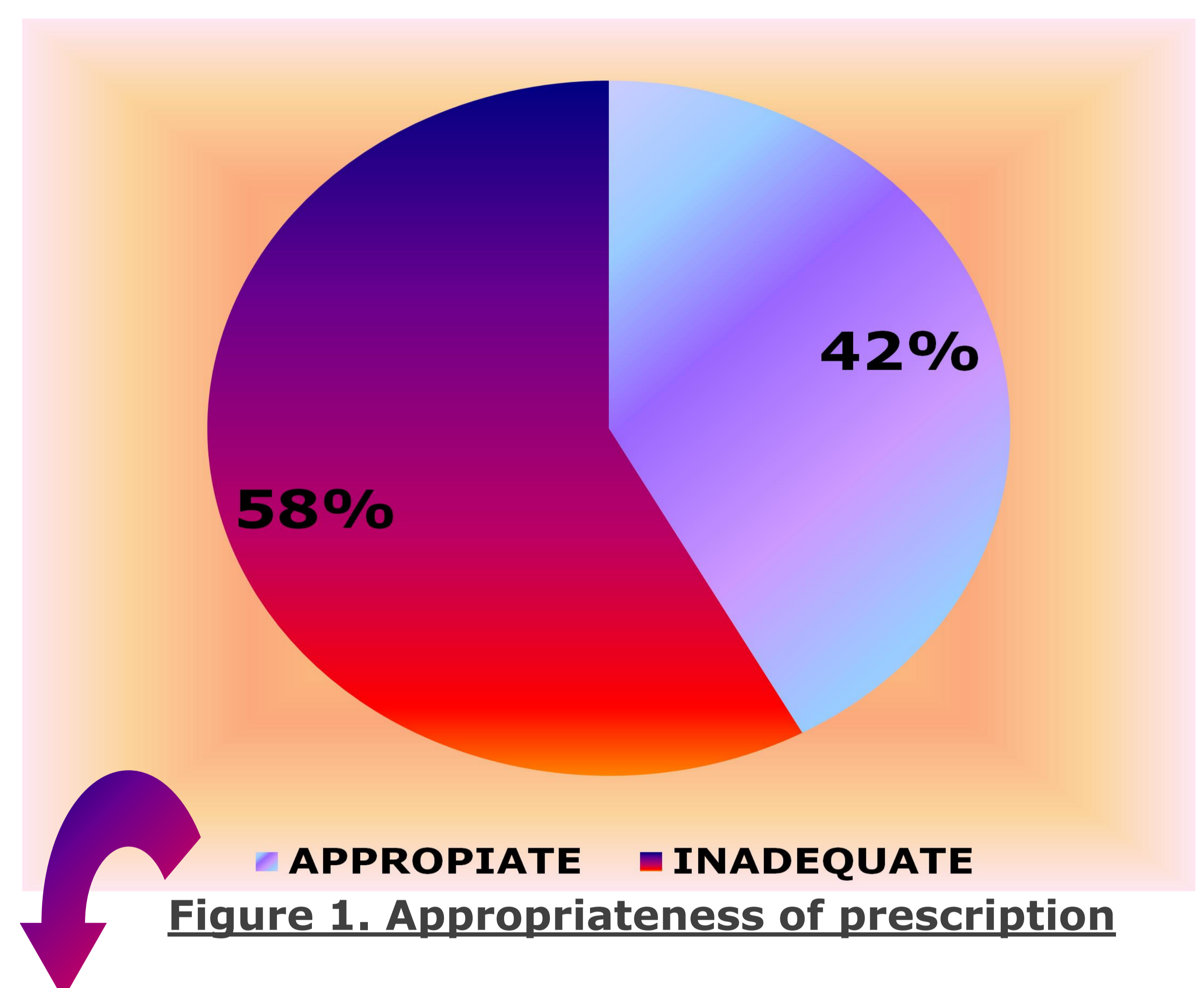
Results

Prescriptions from 1946 patients were analyzed. Of the patients, 54.3% were male and 45.7% female, with a mean age of 59.8 years (17-103).

The mean serum creatinine levels were 0.84 mg/dL ± 0.43 and the mean eGF from the CKD-EPI calculation was 83.05 ± 26.17 mL/min/1.73m².

In 58% of the admissions the drug was not prescribed correctly. Of these:

- ❖ 270 patients were prescribed dexketoprofen when the eFG was less than 50 mL/min/1.73m².
- ❖ 550 of them had an unadjusted prescription with an eFG 50-80 mL/min/1.73m².
- ❖ 370 patients with an eGF >80 mL/min/1.73m² were prescribed NSAIDs for longer than 48h.



PATIENTS	eGF THROUGH CKD-EPI (ml/min/1.73m ²)	CAUSES OF INADEQUACY
N= 270 (13%)	<50	Contraindicated administration
N=550 (26.8%)	50-80	Unadjusted doses
N=370 (31%)	>80	Unadjusted treatment duration

Table 1. Causes inappropriate prescriptions and function of the different strata of eFG

Conclusions

58% of the intravenous NSAID prescriptions did not conform to the SPC recommendations. Due to this fact and in order to prevent renal toxicity it is recommended:

- ❖ To establish protocols for pain management during hospitalisation to limit the duration of these drugs to 48 hours and adjust the dose to the patient's renal function.
- ❖ To enhance the proactive role of the pharmacist in individualised patient monitoring.