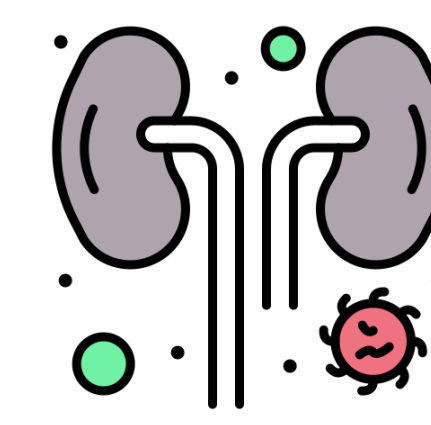


Background

- Frequently used in Orthopedic Surgery Departments (OSD)
- Indicated in perioperative period for their analgesics properties
- To spare usine opioïde
- Multiple prescribers

Clinical pharmacy development in Orthopedic Surgery departments highlighted **dysfunctions** in prescribing **NSAIDs** for patients **over 75 years old** who are at high risk of adverse effects

Non-steroidal anti-inflammatory drugs (NSAIDs)



High risk of adverse effects in Elderly patients

- Gastrointestinal
- Renal



Serious adverse effects imputed by pharmacovigilance center

Aim and Objectives

- To assess the risks associated with prescribing NSAIDs for patients over 75 years old in Orthopedic Surgery Department
- To suggest adjustments to secure the prescriptions

Methods

- Retrospective and observational study
- Between january and october 2021
- On all NSAIDs prescriptions for patients over 75 years old in OSD

➤ **Treatments which may cause renal failure in elderly patients have been recovered**

- Angiotensin-converting enzyme inhibitors (ACE inhibitors)
- Angiotensin receptor blockers (ARB)
- Diuretics

A specific attention was given to patients having presented a serious adverse effects including a declaration to **pharmacovigilance**

Results

584 patients received NSAIDs in the Orthopedic Surgery Department

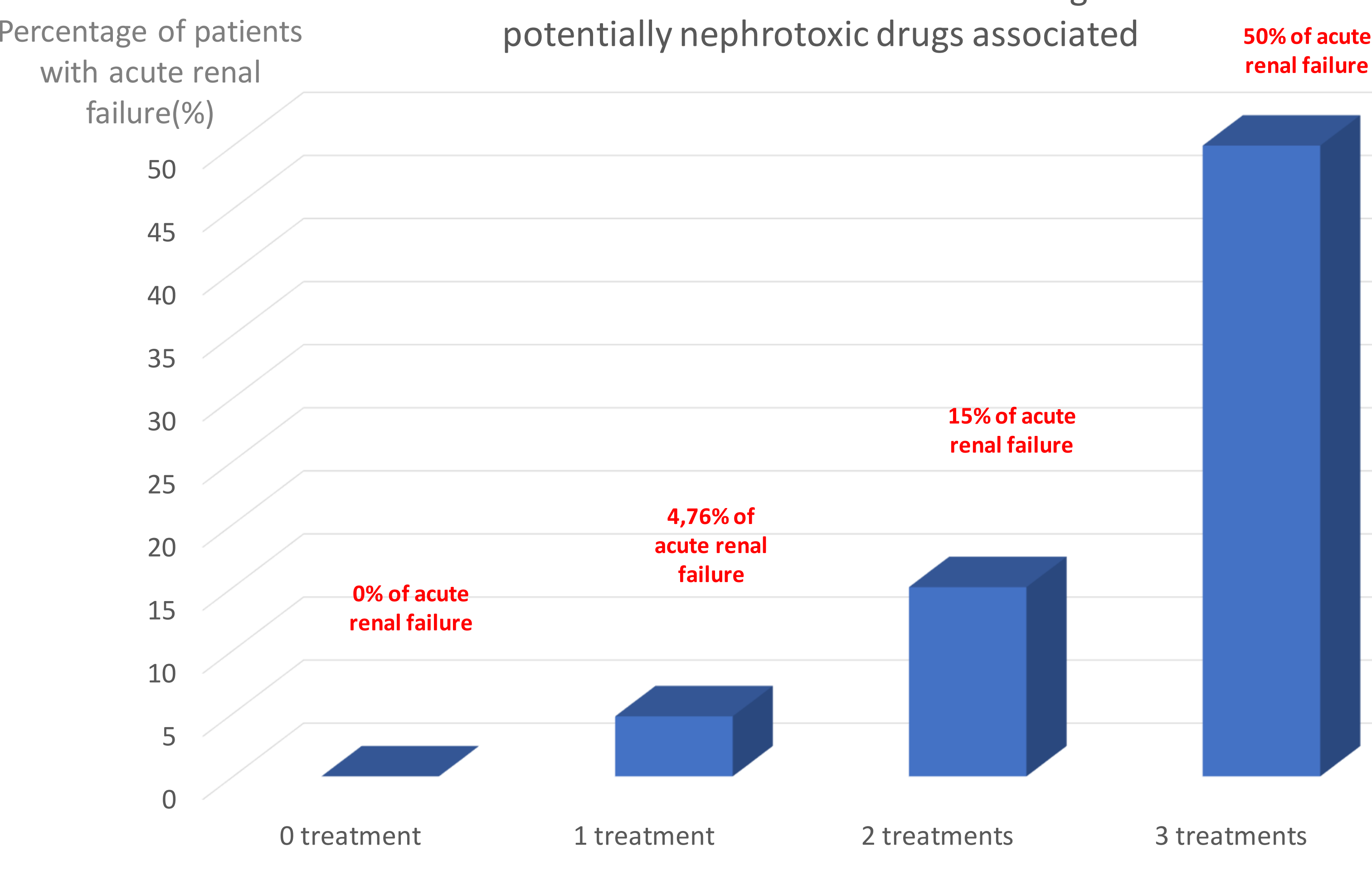
80 patients were over 75 years old (13,7%)

21 patients were taking ACE inhibitors (26%)

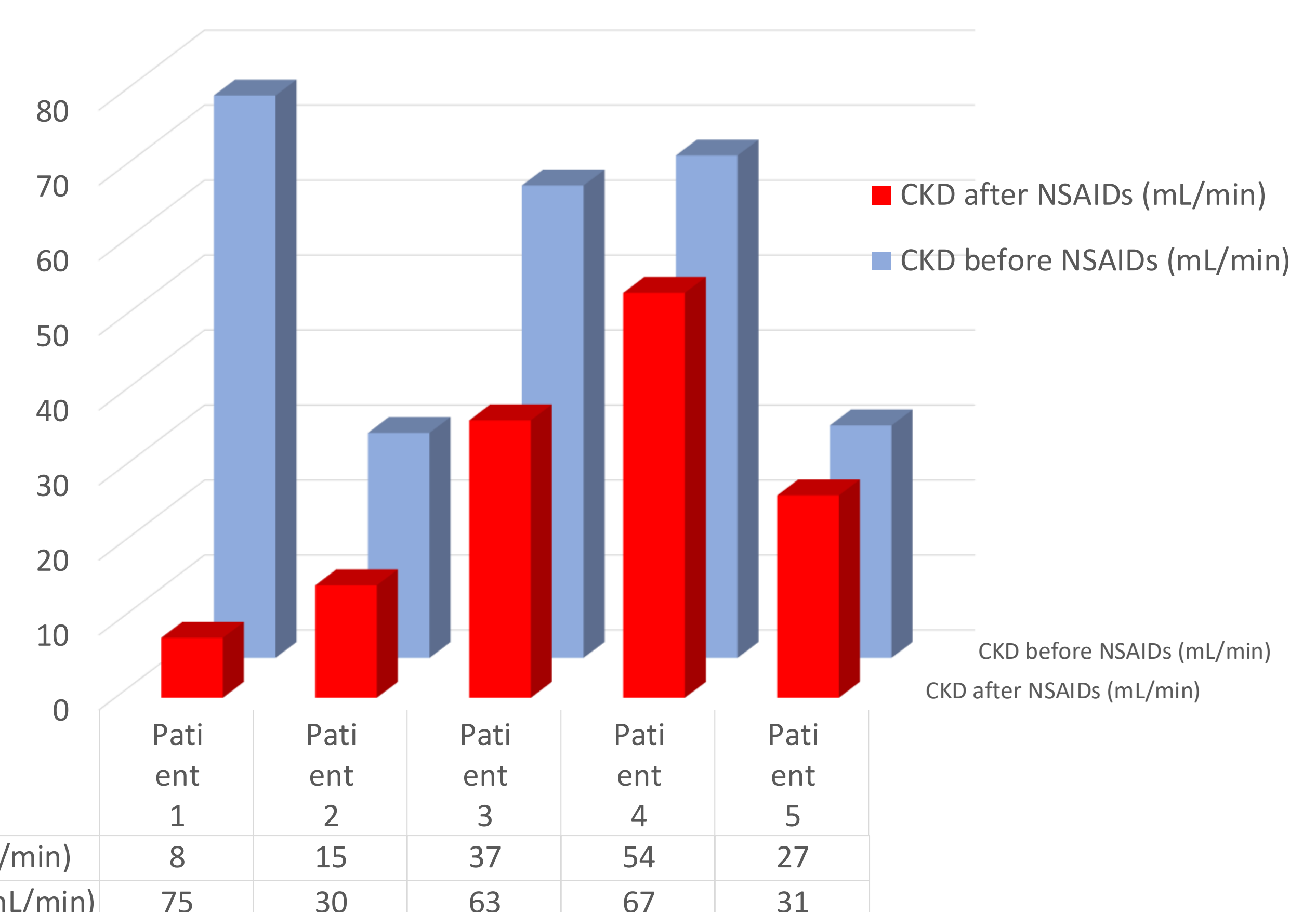
17 patients were taking ARB (21%)

13 patients were taking diuretics (16%)

Evolution of the risk of acute renal failure according to the number of potentially nephrotoxic drugs associated



Evolution of renal clearance before and after taking NSAIDs in patients with acute renal failure



Conclusion

The inappropriate prescriptions of NSAIDs observed in elderly patient and their **association** to other **potentially nephrotoxic drugs**, **increases the risk of renal adverse effects**. The actions implemented initially were setting analgesic protocols adapted to the patient's age according to the latest recommendations. Secondly, both pharmaceutical and medical prescriptions are being monitored daily. Since surgery involves several prescribers (anesthesiologists, surgeons, doctors), harmonizing prescription practices is currently being considered.