



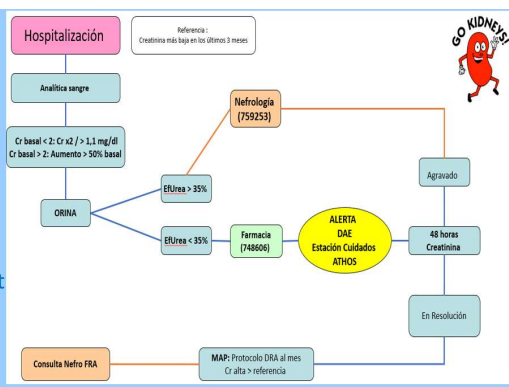
EARLY DETECTION OF PRERENAL AKI INPATIENTS THROUGH MULTIDISCIPLINARY ACTION.

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What was done?

A Multidisciplinary protocol was established for the detection and early action of prerenal AKI inpatient with hospital and Primary Care monitoring.



Why was it done?

AKI is an **underdiagnosed** syndrome due to delay in detection and late referral to the nephrology unit.

The world **incidence** is about 23% and it's increasing.

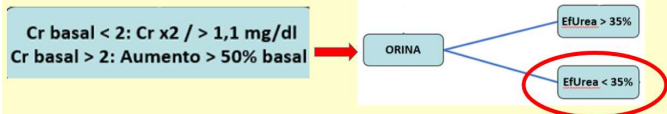
A **real-time electronic alert system** integrated into a multidisciplinary protocol could be useful for **early identification** and diagnosis.

Among the **risk factors** associated with AKI are the use of **nephrotoxic drugs** such as NSAIDs and COX-2, ACE inhibitors and ARBs, Cyclosporine and Tacrolimus.

How was it done?

How was it done?

An **automated electronic tool**, agreed between Biochemistry, Nephrology and Pharmacy units, was designed for the **selection of AKI patients**.



A **pharmacist** was contacted when a prerenal AKI was detected.



1) Review of clinical record to detect prerenal AKI risk factors: depletion volume, nephrotoxic drugs

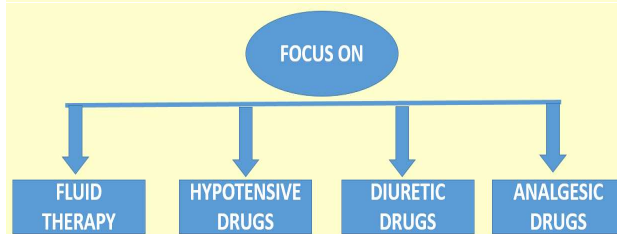
2) Evaluate potential drug-induced nephropathy for two mechanisms:

a) Acute tubular Necrosis:

Aminoglycoside, intravenous contrast media, cisplatin, carboplatin, Amphotericin B

b) Functional AKI (hemodynamically mediated).

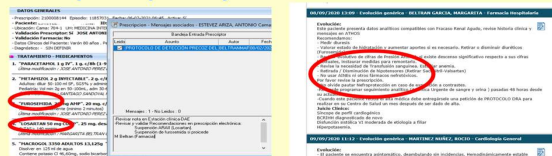
NSAIDs, Cyclosporine, Tacrolimus and ACEIs, ARBs,



3) It was generated ALERT recommended actions: nephrotoxic drugs and hydration measures.

Electronic prescription system

Electronic medical record

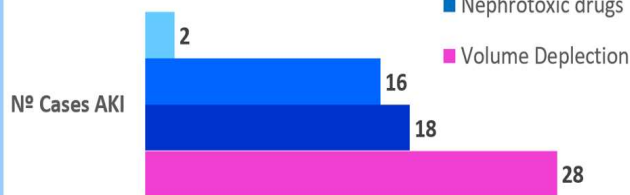


4) An analysis was request to **check renal function:** after 48h and after 1 month of discharge

What has been achieved?

- **Risk factors** to AKI PRERENAL

- NSAID
- ACEI/ARB
- Nephrotoxic drugs
- Volume Depletion



- The **acceptation grade** of recommendation was 27 in 28 cases.

- All cases **kidney function** was **recovered** after 7 and 30 days.

What next?

Patient education and **empowerment** to prevent next cases in those patients.

To design an **explanatory brochure** to patients.



Strategies will be extended to all hospital clinical units.

Data on incidence **morbidity** and **mortality**, as well as on **length of hospital stay**.