INTRODUCTION - BACKGROUND

Metformin-Associated Lactic Acidosis (MALA) is rare (less than 10 / 100,000 patients per year) but represents a common ADE's cause of hospitalization in ICU. It is therefore necessary to study and evaluate this one to know its main risk factors and avoid it.

OBJECTIVES

TO ASSESS THE INCIDENCE OF MALA
TO IDENTIFY ITS MAIN RISK FACTOR
TO ASSESS THE SEVERITY FOR PATIENTS
TO ORGANIZE PREVENTION STRATEGIES

METHODS

→ 21-month prospective monocentric study (06/2014 → 01/2016)
→ ICU of 20 beds for 900 admissions per year
→ Inclusion of all ICU patients admitted for MALA
→ Pharmaceutical analysis of each clinical case

RESULTS

Main risk factor

Gastroenteritis

Diarrheas and vomitings

Dehydration

Acute Kidney Injury (AKI)

Accumulation of metformin

Lactic Acidosis

21 cases

→ 13,6% of ICU admissions for ADE
→ 1,4% of the global ICU admissions

→ 7 days in ICU and
→ 14 days post-ICU

Average of IGS II score = 52 [25 - 87]

Mortality at 1 year : 35%

76,2% of cases was avoidable

2 patients (9,5%) died during their stay

1 year follow-up

- 1 patient was lost to follow-up
- 5 patients (27,8%) died after their hospital discharge

2 patients (15,4%) have kept renal functional impairment

DISCUSSION - CONCLUSION

It is necessary to continue and develop prevention strategies to prevent their appearance, to limit their consequences and to reduce their recurrences.

In our department, we will electronically send this information to GPs in order to make their diabetic patients more aware of the precautions with this type of treatment.

Admissions for MALA → Still too frequent
- It was avoidable in most cases
- Dehydration, the continuation of nephrotoxic treatment and AKI remain the main risk factor

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