



CP-150.

## INCIDENCE OF LACTIC ACIDOSIS IN PATIENTS TREATED WITH METFORMIN



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### • BACKGROUND

- Metformin is one of the most commonly prescribed medications for the treatment of type 2 diabetes mellitus (DM), particularly in overweight patients.
- A potential complication of metformin is the development of lactic acidosis (LA). This potential increased risk remains controversial.
- Some suggest that DM, rather than metformin may predispose patients to lactic acidosis.
- The summary describes this complication as very rare (<1/10,000 patient-years).

### • OBJECTIVE

- To evaluate the occurrence of LA in type 2 DM patients treated with metformin.
- To study the prevalence of acute renal failure in these patients and the final outcome.

### • MATERIAL AND METHOD

- Observational retrospective study in a general hospital.
- Discharge certificates including codes of LA and DM (ICD -9 International Classification of Diseases) during 2013 were classified; we selected those under treatment with metformin.
- Exclusion criteria: Patients in a decompensated diabetes/ketoacidosis and patients with chronic renal failure (known risk factors for LA).

### • RESULTS

- 126 discharge certificates coding LA, DM, and treatment with metformin were classified.
- 87 (69%) of these patients reached some exclusion criteria.
- Among the 39 remaining patients, in 14 of them "LA related to the use of metformin" was specifically described in the discharge certificate.
- Distribution in sex and age: 58% men and 81±10 years.
- 100% of the cases presented Acuted Renal Failure.
- One patient died, the rest were discharged after a 8±3 days median stay.
- According to data provided by the health service, 9,713 patients were being treated with metformin in our area. It resulted in an incidence of 14 /10,000 patient-years, much higher than expected.

### • CONCLUSION

- We found a **much higher incidence of LA** than that described in the bibliography.
- This potentially fatal complication should be avoided by means of **controlling risk factors**.
- A thorough review of all concomitant medication is essential.
- We consider **education of physicians and patients essential**, in this point, **pharmacists have an important role**.