Challenges of diabetes management during COVID-19 infection

H. Chaabouni, F. Smaoui, K. Mnif, K. Rekik, C. Marrakchi, M. Koubaa, M. Ben Jemaa
Infectious diseases department; Hedi Chaker Hospital, Sfax, Tunisia

BACKGROUND:
- Diabetic patients are more susceptible to severe forms of COVID-19 infection. They also may have poor glycemic control due to infection and corticosteroids.
- We aimed to describe the frequency of diabetes and its management in patients with COVID-19 infection.

PATIENTS AND METHODS:
- A retrospective study, including COVID-19 patients
- In the department of infectious diseases in Hedi Chaker hospital
- Between November 2020 and February 2021.

RESULTS:
- In total, 351 patients were collected.
- The prevalence of diabetes (Figure 1)

![Fig1: Prevalence of diabetes](image)

- Diabetes was type 2 in 94.1% of cases.
- Patients were without any treatment (29%), treated with oral antidiabetic drugs (52.3%) or treated with insulin (38%).
- Degenerative complications: 22.2 % of patients.
- For diabetic patients:
  - Severe clinical forms: 75.2%.
  - Treatment: Corticosteroids on 91.5 %. (Between 4 mg (10.5%) and 24 mg (29.4%) of dexamethasone).
  - A poor glycemic control: 72.5 %, treated with insulin in all cases.
- Regarding non-diabetic patients (198 patients):
  - 14.2% of patients developed diabetes.
  - For these patients, dexamethasone was prescribed at a posology over 12 mg in 60.7% of cases.
  - The average duration of corticosteroids: 9 days.
  - All patients were discharged with oral antidiabetics.

CONCLUSION:
- People with diabetes should be educated regarding the management of their condition during COVID-19 infection, including medication changes.
- If neglected, it may result in increased morbidity and mortality.