

## **Benefits of insulin therapy in type 2 diabetes of the elderly**

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### **ABSTRACT**

**Introduction:** Our aim was to determine the benefits of insulin therapy on the progressive outcome of type 2 diabetes in the elderly.

**Methods and materials:** a retrospective study carried out at the Internal Medicine department of the Military Hospital of Gabes (Tunisia), collecting type 2 diabetic patients put on insulin after the age of 60, for treatment failure under oral anti-diabetics.

**Results:** 110 patients including 67 women (61%) with a mean age at 65.5 years. The average age at diagnosis of diabetes was 49 years (31-75) and the average duration of diabetes 9.9 years (3-32). 20% of the patients were smokers and 6.3% alcoholics. The other risk factors, in particular hypertension and dyslipidemia, were noted in 79 and 36% of cases, respectively.

Adherence to therapy before switching to insulin was considered good in 70% of patients. A correct diet and a minimum acceptable physical activity were followed by 51 and 65.5% of patients, respectively.

Insulin analogues were prescribed for the majority of patients (95%) and the basal "bed time" protocol was indicated in 64% of cases. 18% of our patients had in addition to insulin, oral anti-diabetic drugs.

After insulin therapy, we noted a marked improvement in all glycemic targets with a significant "p" at six months, 1 and 2 years of follow-up. This variation was not influenced by association or not with oral anti-diabetics or diet.

Likewise, there was a markedly lower frequency of occurrence of degenerative complications with insulin. Hypoglycemic accidents were not significantly increased.

**Conclusion:** Insulin therapy represents an indisputable benefit in the management of type 2 diabetes in the elderly. Do not hesitate to use insulin, as soon as possible, in elderly type 2 diabetics in oral treatment failure.