

## Poorly Controlled Blood Glucose in Acromegaly Patients

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### Background

Acromegaly is caused by excessive secretion of growth hormone (GH) and the resultant persistent elevation of insulin-like growth factor (IGF-1) levels. Generally, the most common cause of acromegaly is pituitary adenoma. Diabetes mellitus is accompanied in some acromegaly patients with insulin resistance.

### Materials and methods

We encountered a 35 years old women was admitted for controlled glycemic state in pre-operation. The diagnosed was type 2 diabetic patients who had a poorly controlled glycemic state (fasting blood glucose 287 mg/dl) and was diagnosed as acromegaly with elevation IGF-1 levels (916 ng/ml). The patients showed definite acromegaly features. However, in the first screening test, GH, FSH, prolactin, cortisol and testosterone levels were normal, and patients gone for transsphenoidal operation for hypopise tumor. A large amount of insulin (95 units/day) was required to control the blood glucose level. The patients was treated with octreotide and somatostatin analogue.

She was finally discharged from the hospital with a multiple insulin regimen (total daily dose 84 U) After several months, we evaluating acromegaly and the patients still in poor controlled glycemic.

### Discussion

The delay in diagnosis in acromegaly may exacerbate complication due to GH hypersecretion and this hypersecretion leads to reduced insulin intensitivity.

Our current case had normal liver and renal function. The poor nutrition status which remain in this period may therefore explain these higher blood glucose and poor glycemic control.

### Conclusion :

We report patient with diabetes mellitus secondary to acromegaly with poorly control glycemia.