This study confirms that biochemically uncontrolled patients with acromegaly appear to suffer from a greater number of common comorbidities than their controlled counterparts.

Despite the use of multiple treatment modalities, almost a third of patients remain biochemically uncontrolled, demonstrating the difficulty of achieving biochemical control.

The prevalence of HTN, DM, and sleep apnea were higher in this registry than in European registries: 39.4%, 25.3%, and 17.1%, respectively, in the Belgian registry; and 39.3%, 37.1%, and 13.2%, respectively, in the Spanish registry, respectively.

**Clinical Outcomes**

- Diabetes mellitus (DM), hypertension (HTN), sleep apnea, and cardiomyopathy were less frequent in controlled compared to uncontrolled patients.
- Diabetes mellitus
  - 121 patients were followed for mean 8.8 years or 1065 patient years.
  - Mean age was 55.4 years, and 55.4% were female.

**Background**

- Acromegaly, caused by excessive growth hormone (GH) secretion that stimulates insulin-like growth factor (IGF) production predominantly from the liver, results in considerable comorbities, declines in quality of life, and increased mortality.

- Real world data on treatment patterns and morbidity of acromegaly patients who attained biochemical control compared with those who did not are limited.

**Objective**

To examine the relationship between achieving biochemical control and comorbidities.

**Results**

- Baseline Characteristics
  - 121 patients were followed for mean 8.8 years or 1065 patient years.
  - Mean age was 55.4 years, and 55.4% were female.

- Baseline Characteristics
  - Controlled
  - Disconnected
  - Uncontrolled
  - All N = 70
  - N = 70
  - N = 69
  - N = 121

- **Age, mean (SD)**
  - Controlled: 50.0 (15.5)
  - Disconnected: 52.6 (18.6)
  - Uncontrolled: 57.6 (18.6)
  - All N = 121: 55.4 (16.7)

- **Age at diagnosis, mean (SD)**
  - Controlled: 43.9 (14.7)
  - Disconnected: 37.8 (14.4)
  - Uncontrolled: 41.8 (18.6)
  - All N = 121: 42.4 (15.0)

- **Race/ethnicity, n (%)**
  - Caucasian: 51 (72.9)
  - Asian: 9 (12.9)
  - Other: 12 (17.2)
  - Adrenal insufficiency, n (%)
  - Hypothyroidism, n (%)
  - Baseline Characteristic
  - **Treatment Received at Any Time During the Study Period**
  - **Clinical Outcomes**
  - Diabetes mellitus (DM), hypertension (HTN), sleep apnea, and cardiomyopathy were less frequent in controlled compared to uncontrolled patients.
  - The prevalence of HTN, DM, and sleep apnea were higher in this registry than in European registries: 39.4%, 25.3%, and 17.1%, respectively, in the Belgian registry; and 39.3%, 37.1%, and 13.2%, respectively, in the Spanish registry.

**LIMITATIONS**

- Many patients were initially treated elsewhere before referral to CSMC-PC. Results therefore reflect care from a variety of providers and may be incompletely documented.
- Institutional variation may limit the generalizability of these findings.
- Small numbers make statistical comparisons not possible.

**Conclusions**

- This study confirms that biochemically uncontrolled patients with acromegaly appear to suffer from a greater number of common comorbidities than their controlled counterparts.
- Despite the use of multiple treatment modalities, almost a third of patients remain biochemically uncontrolled, demonstrating the difficulty of achieving biochemical control.

**References**

3. In 16 on first-line pharmacotherapy, 13 (81%) received further treatment: 4 had surgery and 9 had further pharmacotherapy.
4. By the end of follow-up, 88 (73%) patients required treatment with multiple modalities.
5. Diabetes mellitus

**Limitations**

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**Conclusions**

- This study confirms that biochemically uncontrolled patients with acromegaly appear to suffer from a greater number of common comorbidities than their controlled counterparts.

- Despite the use of multiple treatment modalities, almost a third of patients remain biochemically uncontrolled, demonstrating the difficulty of achieving biochemical control.

**References**

2. National Heart, Lung, and Blood Institute: Acromegaly: Clinical Diagnosis and Management for Primary Care.