

Gender aspects in the biochemical control of acromegaly: evaluation of 607 cases from the Austrian Acromegaly Register

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Aims and Methodology

The Austrian Acromegaly Register is an initiative of the Austrian Society for Endocrinology and Metabolism, formally established in 2005. Data are collected by two trained nurses, who visit all centers and continuously entered in a database managed by Lohmann & Birkner, Berlin, Germany.

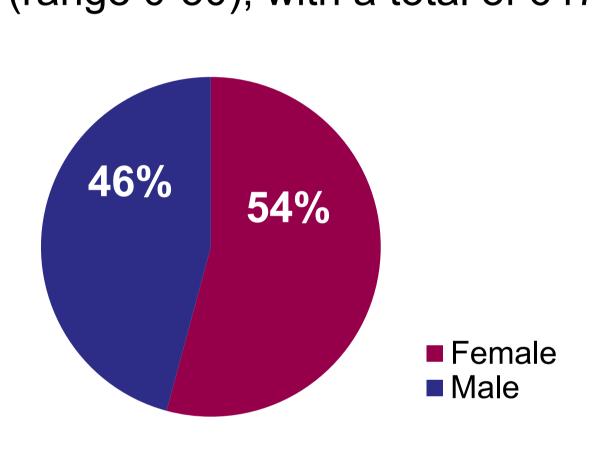
We analyzed the data collected within the Austrian Acromegaly Register till the end of 2013. Here we report gender-specific differences in the presentation, therapy and biochemical control of acromegaly in patients included in this registry.

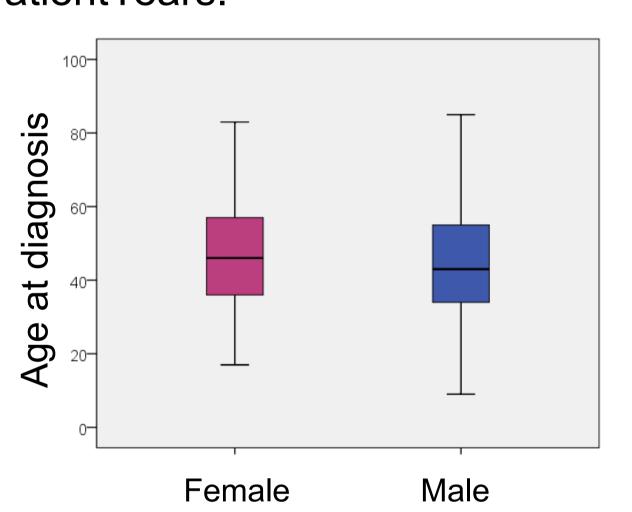
Data on biochemical control were collected in 476 patients with acromegaly and disease duration longer than 9 months, who were last visited between 2003 and 2014. Disease control was evaluated by GH less than 1.0 ng/ml during an oral glucose suppression test and/or normal ageand gender-specific IGF-1. Outcome data were available for 418 patients.

RESULTS

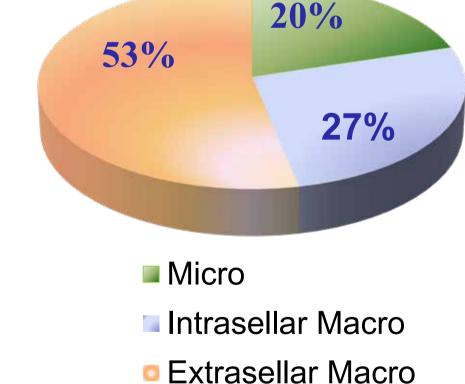
Study Population

At the time of data lock, 607 patients had been enrolled, 329 females and 278 males. Patients were followed for 10.7 ± 9 years (range 0-50), with a total of 6470 PatientYears.





Tumor Size



Tumor type	Female (%)	Male (%)
Microadenoma	22	18
Intrasellar macroadenoma	28	24
Extrasellar macroadenoma	50	58

Younger age and male gender at diagnosis of acromegaly are associated with larger tumour size (P=0.001).

Higher prevalence of comorbidities in women

	Diabetes	Hypertension	Diabetes + Hypertension
Female (%)	29	50	20
Male (%)	24	45	15

Acknowledgements

We thank all participating centers and patients.







Therapy

surgery (73% one operation, 10% two operations, 6% had 3-5 operations) 11.4% first line medical therapy on medical therapy at the last visit 22.4% radiotherapy, 1.8% only radiotherapy

Gender differences in biochemical control

Medical Therapy

50% of females and 62% of males with biochemically controlled disease receive concomitant medical therapy for acromegaly

62 % of patients receiving concomitant medical therapy are biochemically controlled

Radiotherapy 71 % of patients who had undergone radiotherapy are cured

Biochemically controlled patients: 71% (77% of females, 64% of males) 26.6% 73.4% receiving medical therapy cured patients Higher biochemical control rate in females

Higher cure rate in females

Mortality rates

Mortality rates were 2.9% in males and 3.3% in females, but mean age at death was 63 years for men and 73 years for women.

*Centers and Patients

Medical University of Vienna (230 pt), Medical University of Graz (113 pt), Medical University of Innsbruck (69 pt), SALK – St. Johanns Hospital Salzburg (58 pt), General Hospital of Linz (57 pt), Rudolfstiftung Hospital (21 pt), Klagenfurt Teaching Hospital (19 pt), Hanusch Hospital Vienna (12 pt), Donau Hospital Vienna (10 pt), Feldkirch Teaching Hospital (8 pt), Hohenems Teaching Hospital (6 pt).

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Pituitary - Clinical

