

# Body image perception in acromegaly is not associated with objective acromegalic changes, but depends on depressive symptoms



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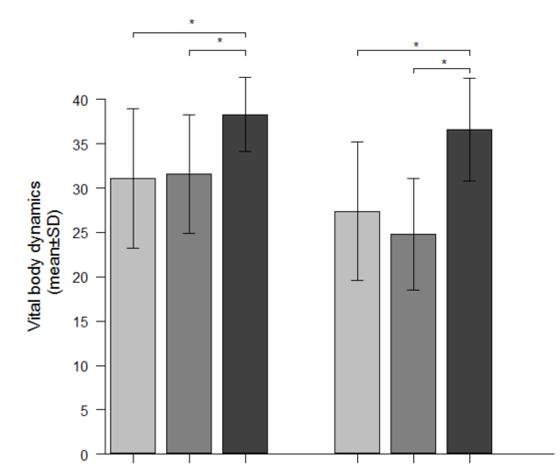
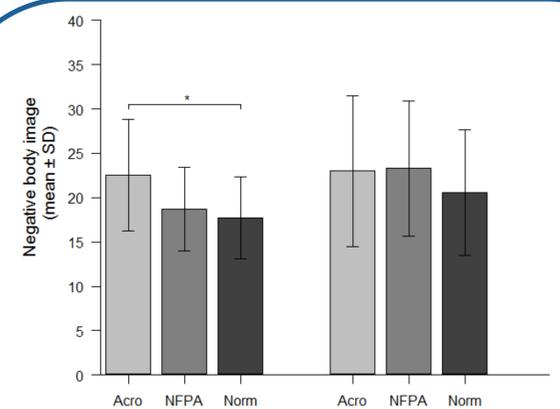
## 1 Introduction/ Objectives / Methods

Diagnosis of acromegaly is often delayed up to 10 years after disease onset despite obvious visual changes, bone and soft-tissue deformities. We hypothesized that a reduced sense of self and body perception in acromegaly, possibly mediated by psychiatric or cognitive alterations, might contribute to the delayed initiation of a diagnostic work-up. In a cross-sectional study, we investigated perceived body image by standardized questionnaires (FKB-20, FBeK) in 81 acromegalic patients and contrasted them to a) 60 patients with NFPA who lack severe facial and physical alterations and b) to normative values of healthy controls. We further evaluated subjective body image perceptions in relation to objective acromegalic changes, to disease severity and psychiatric pathology (e.g. depression, cognitive impairment).

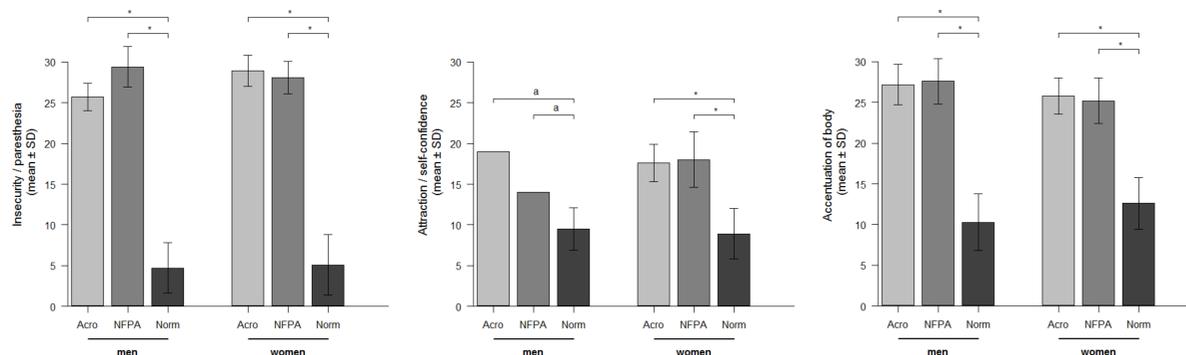
## 2 Results

	Acromegaly n = 81	NFPA n = 60	p-value
<b>Sex (male/female, n (%))</b>	<b>38/43 (46.9/53.1)</b>	<b>39/21 (65.0/35.0)</b>	<b>0.033</b>
<b>Age (years, mean±SD)</b>	<b>55.69 ±12.17</b>	<b>60.22 ±10.61</b>	<b>0.023</b>
BMI (kg/m <sup>2</sup> , mean±SD)	29.04 ±5.20	28.49 ±5.10	n.s.
<b>Primary adenoma type</b>			
Micro (%)	8.7	6.7	
Macro (%)	66.5	81.7	n.s.
Unknown size (%)	24.8	11.6	
<b>Treatment</b>			
Surgery (%)	91.4	86.7	n.s.
Radiotherapy (%)	24.7	25.0	n.s.
<b>Satisfactory treatment status (%)</b>	60.5	-	-
<b>Comorbidities</b>			
Arrhythmia (%)	19.8	5.0	0.022
Cardiomyopathy (%)	11.1	0	0.011
Arthralgia (%)	66.7	41.7	0.014
Carpal tunnel syndrome (%)	46.9	18.3	0.002
Diabetes mellitus (%)	27.2	10.0	0.018
Pathological glucose intolerance (%)	28.4	0	< 0.001
Pituitary insufficiency (%)	61.7	75.0	0.001
Sleep apnea (%)	34.6	10.0	0.002

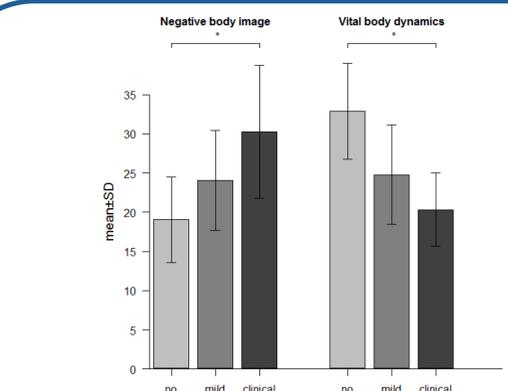
**Table 1** Clinical characteristics of the study population.



**Figure 1:** FKB-20-scales in acromegaly, patients with NFPA and students.



**Figure 2:** FBeK-scales in patients with acromegaly, patients with NFPA and students (norm values).



**Figure 3:** FKB-20-scales in patients without, with mild or moderate and with clinical depression.

## 3 Conclusions

A disturbed body image perception in acromegalic patients is unrelated to their objective appearance and similar to those of NFPA patients without major bodily changes. This fact might contribute to the problem of late disease diagnosis.

## 4 References/Bibliography

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