

Quality of life in patients with acromegaly vs non-functioning pituitary adenomas and healthy control group.

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OBJECTIVES

Acromegaly is a rare and chronic illness characterized by changes in the appearance and functioning of the internal organs in the affected person.

Acromegaly has an important impact on health-related quality of life. **The aim** of study was to ascertain the quality of life of patients with uncontrolled vs controlled acromegaly and compared to those with non-functioning adenomas and healthy control group.

METHODS

124 participants underwent a cross-sectional assessment including the quality of life (AcroQoL, WHOQoL BREF), psychiatric morbidity (GHQ-28) and acceptance of illness (AIS). The sample consists of patients with acromegaly (AG) divided into two subgroups accordingly to minimal GH concentration during the OGTT or profile of GH and level of IGF-1: controlled and cured acromegaly group (CAG n=19) and active acromegaly group (AAG n=31); patients with non-functioning adenomas group (NFG n=37) and healthy control group (CG n=37) matched according to age.

Table 1. General characteristics of acromegaly (AG) and non-functioning groups (NFG).

Factor	Mean±SD (AG)	Mean±SD (NFG)
Age	51.7 ± 14.5	48.9 ± 15.12
Sex (F%)	62%	72%
Illness duration since diagnosis (years)	4.5 ± 1.5	2.9 ± 2.01

Table 2. The frequency of some symptoms in acromegaly (AG) and non-functioning groups (NFG).

Symptoms	AG (n= 50)	NFG (n= 37)	P
Headache	33 (66%)	23 (62%)	< 0.88
Decreased libido	18 (36%)	10 (27%)	< 0.67
Joint pain	34 (68%)	13 (35%)	< 0.003
Sweating	38 (76%)	14 (17%)	< 0.001
Changes in facial	43 (86%)	0	< 0.000
Visual field disturbances	27 (54%)	19 (51%)	< 0.1
Galactorrhoea	4 (8%)	8 (21%)	< 0.04

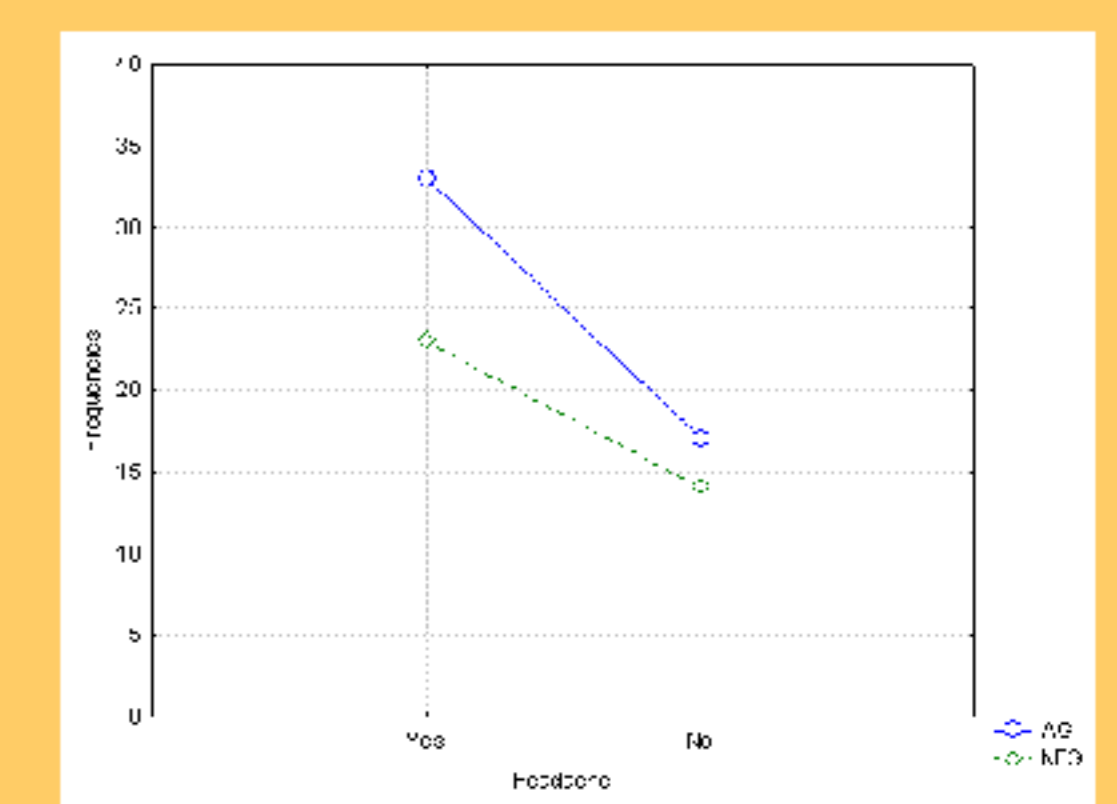
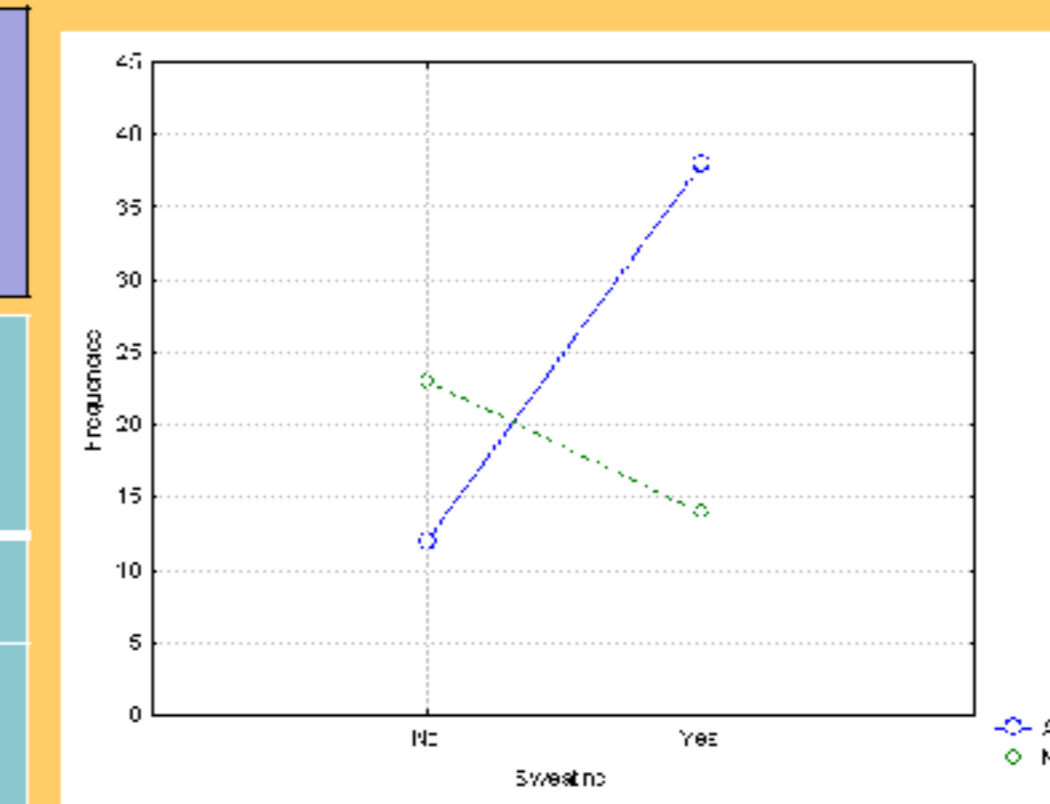


Figure 1-2. Comparison between core somatic symptoms in AG and NFG subjects.

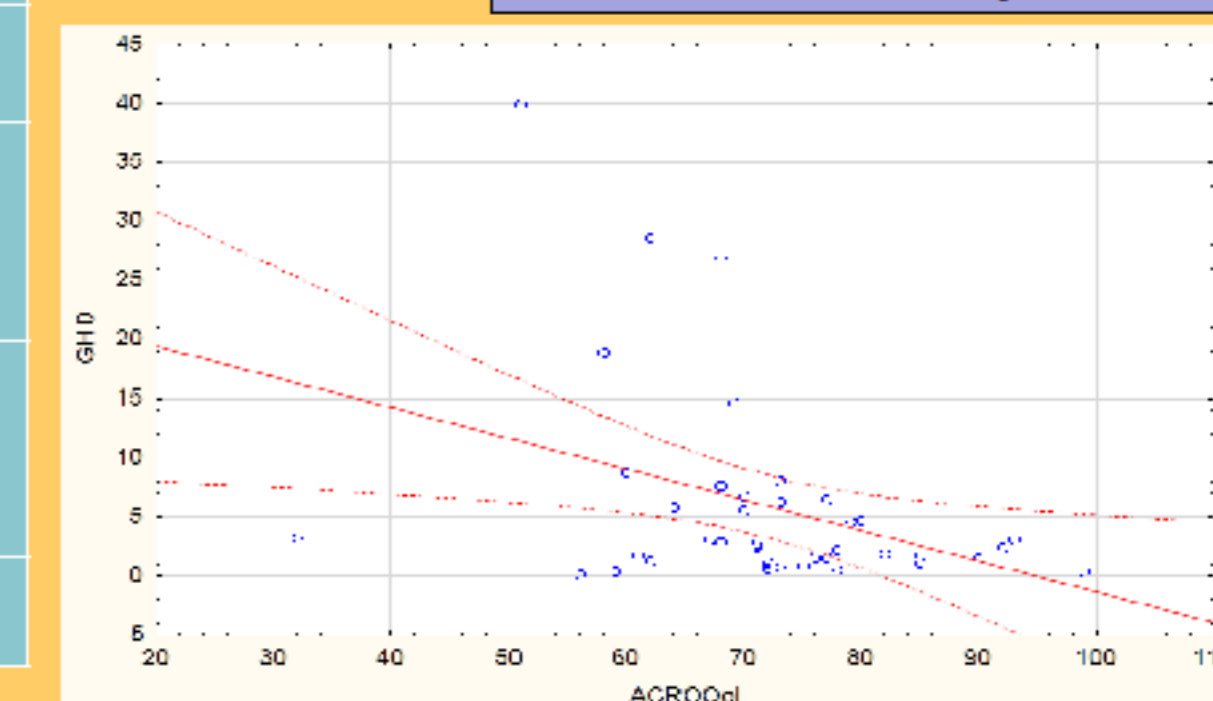


Figure 3. Correlation between GH level and AcroQoL score in acromegaly group (AG).

RESULTS

No significant differences were identified between CAG, AAG and NAG groups referring to quality of life, psychiatric morbidity and acceptance of illness. Compared with healthy controls, AAG group suffered more from anxiety and insomnia ($p=0.031$) and had significantly poorer quality of life in psychological domain measured with WHOQoL BREF ($p=0.004$). The average AcroQoL score was 56.72 ± 16.03 , with the mean physical dimension score of 53.81 ± 19.99 and mean psychological dimension of 58.21 ± 15.59 . The lowest score was noted in subscale "appearance" 45.28 ± 19.91 and the highest in subscale "personal relations" 71.28 ± 16.54 . In acromegaly group we observed statistically significant positive correlation between the level of IGF-1 and prevalence of psychopathological symptoms measured by the GHQ-28. We also observed negative correlation with the level of GH and AcroQoL in total score as well as in psychological dimension, including subscale "appearance". The illness duration since diagnosis was identified as a negative predictor of physical dimension of AcroQoL ($r=-0.35$, $p=0.035$), social domain of WHOQoL ($r=-0.43$, $p=0.009$) and acceptance of the illness ($r=-0.42$, $p=0.011$). In acromegaly group we also observed statistically significant positive correlation AIS with AcroQoL ($r= 0.66$, $p < 0.000$) and negative correlation with GHQ-28 ($r= - 0.36$, $p < 0.009$).

CONCLUSIONS

- Concerning the diagnosis, not only biochemical and radiological parameters, but also psychological aspect should be evaluated in acromegaly.
- The coexistence of psychopathological symptoms has impact on the quality of life, as well as on the acceptance of the disease.
- The higher acceptance of illness, the better quality of life is observed in acromegaly.
- There is no difference in psychosocial perspective between patients with acromegaly and non-functioning adenomas in the present study group.
- IGF-1 and GH could be an independent negative predictors of quality of life among those patients.

References

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