



A Case with Acromegaloidism



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Background

Acromegaloidism is characterized by features of acromegaly without excessive growth hormone (GH) secretion.

Case Report

• A 24 year-old male presented with acral enlargement and bilateral non-inflammatory wrist and ankle pain.

• He had coarse facial features, prominent clubbing, enlarged hands and feet.

- Bodymass index was 21.3 kg/m².
- Physical examination did not reveal arthritis.
- He did not have a relevant personal and family history.
- He was not on any medication.
- Due to his acromegaloid appearance he was referred to endocrinology out-patient clinic with the diagnosis of acromegaly.

Table 1. Anterior pituitary hormone levels

	Patient values	Normal values
GH ng/ml	0.6	0-4
IGF-1 ng/ml	161	115-358
Cortisol µg/dL	22	3.7-19.4
ACTH pg/mL	63	0-46
PRL ng/mL	17	3.4-23.3
FreeT3 pg/ml	3.3	1.8-4.2
FreeT4 ng/dL	1.16	0.7-1.9
TSH mIU/L	1.6	0.4-4.2
FSH mIU/ml	3.8	1.4-18.1
LH mIU/ml	6	1.5-9.3
Total T ng/dl	506	241-827



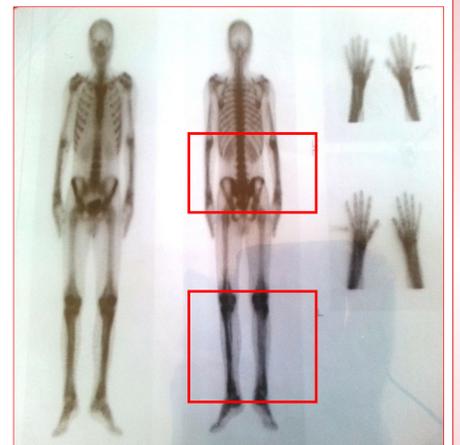
Table 2. Laboratory findings

	Patient values	Normal values
Glucose mg/dl	99	70-110
Insulin IU/ml	4.6	0-17
HOMA-IR	1.1	< 2.5
HBA1C	5.9	4.8-6
Urea mg/dL	26	10-50
Creatinin mg/dL	0.7	0.6-1.2
Na mEq/L	1.16	135-144
K mEq/L	4.3	3.6-5.1
Ca mg/d	3.8	8.4-10.2
P mg/d	3.6	2.3-4.7
Albumin g/dL	4	3.5-5
PTH pg/ml	34	12-72
Dvit ug/l	32	
AST U/L	11	0-31
ALT U/L	12	0-31
ALP IU/L	93	35-105
LDH U/L	256	240-480
ESR mm	26	
CRP mg/L	42	0-5
Hgb g/dL	13.8	12-16
WBC	7400/uL	4300-10300
Plt	192000/uL	156000-373000

X-rays of hands and feet



Whole-body bone scintigraphy



- The nuclear medicine whole-body bone scan showed bilateral increased tracer uptake in forearms and lower legs. Remaining bones had normal skeletal tracer distribution.
- The x-ray and scintigraphy results were consistent with *hypertrophic osteoarthropathy*.
- Further evaluation did not reveal a secondary cause so he was diagnosed with **primary hypertrophic osteoarthropathy**.
- Treatment with nonsteroidal antiinflammatories provided significant relief of pain.

Conclusion

- Presence of acromegaly features without associated biochemical findings may be misinterpreted as mild-early acromegaly or so-called "burned-out" acromegaly.
- Clinicians should also keep in mind the phenomenon 'acromegaloidism', although it is a rare condition.
- An extensive evaluation should be conducted to determine the underlying condition.

*Informed consent of the patient was obtained.