A Rare Case of Diabetes Mellitus: Acquired Lipodystrophy
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INTRODUCTION: Lipodystrophies are heterogeneous group of disorders; characterized by congenital or acquired loss of fat tissue. This disorders also can causes severe metabolic complications during childhood.

COMPLAINT: 10,5 years old girl presented to our clinic due pigmented lesions on her body for 6 months

HISTORY: At 8 years old she visit the rheumatology clinic due to sclerotic lesions on her legs
• Methotrexate treatment with diagnosis of scleroderma

MEDICAL HISTORY/FAMILY HISTORY:
40 th weeks, 2250 gr vaginal delivery
Her parents are non-consanguineous

PHYSICAL EXAMINATION:
• HR: 88/m, BP: 116/70 mmHg
• Weight: 47 kg (+1.4 SDS), Height: 158.7 cm (+2.6 SDS)
• Acanthosis nigricans on neck, prominent musculature, and loss of body fat in lower extremities

LABORATORY
FSH 5.79 mIU/mL
LH 4.28 mIU/mL
Estradiol 29 pg/mL
Fasting glucose 80 mg/dL
Fasting insulin 27 IU/mL
HOMA-IR 6

Autoimmun disease screening, C3,C4 levels and HIV serology was negative

IMAGING
Bone age: 11.5 years
Pelvic USG: pubertal uterus and over size

Whole Body MRI: Loss of fat tissue in bilateral upper and lower extremity, fatty liver.

FOLLOW-UP
In 4 years:
• Voice thickening
• Menstrual irregularity
• Physical examination: Cliteromegaly, hirsutismus, increased appeareance of acanthosis, increased loss of fat tissue on lower extremities

TREATMENT:
• Multi dose insulin (2u/kg)
• Metformin 2x1000 mg

CONCLUSION: Lipodystrophies are rare diseases during childhood, but they can lead to insulin resistance, diabetes mellitus and severe metabolic complications. Although high dose insulin treatment is insufficient for controlling DM, metraleptin replacement therapy can be successful