**Diabetic with Lipodystrophy**

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**Abstract**

Congenital lipodystrophy has no effect on her soccer training or physical activity. She meets with her nutritionist weekly to set up a meal plan to manage her diabetes. She was able to add more protein into her diet to slow down her carbohydrate metabolism. She eats 85 grams of carbohydrates and 100-120 grams of protein everyday. Her blood glucose levels should be at 7mg in the morning and 8-10mg after each meal. 

**Results**

Congenital lipodystrophy is not an eligible condition in sports. Lipodystrophy is a rare condition with a lot of serious contributing factors. Lipodystrophy is a rare condition with a lot of serious contributing factors. 

**Case Report Background**

18-year-old female soccer player presented to pre-participation examination with type 2 diabetes mellitus. Athlete stated she was diagnosed with Diabetes in July and Lipodystrophy at 4 months of age. Her medical records indicated her at-risk for obesity. In her 4-year old appointment, her insulin levels at the time were elevated at 116, and presented with symptoms of generalized lipodystrophy with tissue hypertrophy and insulin resistance. The following year, her triglyceride levels were elevated at 2.58, and her hemoglobin A1c was elevated at 6.1. At age 7, she presented with obesity, fat-storing cells in adipose tissue. Mutations in any of these genes can cause localized or generalized lipodystrophy. The proteins created from these genes are AGPAT2, CAV1, and PTRF.

**Physiological Findings**

Athlete stated she was diagnosed with Diabetes during PPE and Lipodystrophy at 6 months of age. Her medical records indicated at her 4-year old appointment, her insulin levels at the time were elevated at 116, and presented with symptoms of generalized lipodystrophy with tissue hypertrophy and insulin resistance. The following year, her triglyceride levels were elevated at 2.58 and her hemoglobin A1c was elevated at 6.1. At age 7, she presented with obesity and hypertriglyceridemia. She was given a meal plan consisting of 6 meals a day with 100-120 grams of protein and 85 grams of carbohydrates and 100-120 grams of protein everyday. Her blood glucose levels should be at 7mg in the morning and 8-10mg after each meal.

**Differential Diagnosis**

**Conclusions**

Athletes with lipodystrophy have to keep in mind the importance of glucose levels due to the complications of hyperglycemic episodes and other factors leading to diabetic cures if levels are not well controlled. 

**Nutrient Consumption**

**Nutrient** | **Consumption** | **Target**
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Carbohydrates | 343 g | 340 g
Protein | 266 g | 400-420 g
Potassium | 1838 mg | 4700 mg
Calcium | 565 mg | 1000 mg
Vitamin C | 53 mg | 75 mg
Vitamin D | 6 ug | 15 ug
Vitamin K | 72 ug | 90 ug
Vitamin E | 0 mg AT | 15 mg AT

**References**

  - Exercise and Type 2 Diabetes.
  - Case Reports in Endocrinology, 2013, 514639. 