Table 1. Clinical findings

	Case 1	Case 2	Case 3*	Case 4*
Age at diagnosis, year	1.24	0.08	5.16	2.64
Karyotype	XX	XY, t(4;9)(p16.6?;p13.3)	XY	XY
Birthweight, g/gestational weeks	3600/39	1750/33	2200/39	2800/39
Parents	1. cousin	1. cousin	Same region	Same region
Presentation	Adrenal crisis	Adrenal crisis	No symptom	Adrenal crisis
Length/Height, cm (SDS??)	72 (-1.83)	44 (-6.05)	105 (-1.10)	95 (0.96)
Weight, g (SDS??)	8000 (-2.65)	1675 (-4.67)	18.6 (-0.10)	11.5 (-1.55)
External genitalia	Labial synechiae	Normal female	Penis 6x1.8 cm	Penis 5x2 cm
Adrenal imaging	Normal (MRI)	Hyperplasia (MRI)	Normal	Normal
Basal cortisol, µg/dL	< 1	8.15	7.6	9.2
Stimulated cortisol, µg/dL	< 1	8.03	7.8	9.4
Adrenocorticotropic hormone, pg/mL	259	1250	>1250	>1250
Progesterone, (ng/mL, N: < 30)	1.4	0.03	< 0.1	< 0.1
DHEAS, (µg/dL, N: 50-500)	4.2	16.41	48.5	30.7
17-OHP, ng/mL	0.7	0.56	0.34	
1.4 Androstenedione, ng/mL	0.18	1.2	0.33	0.33
Testosterone, (ng/mL)	0.3	0.02	< 0.13	< 0.13
Aldosterone, (ng/mL, N: 35-410)	< 1	33	1.3	0.16
Renin, pg/mL (N: 5.2-33.4) PRA (N:0.98-4.18)	> 500 -	> 520 -	-	- 19.43
CYP11A1 mutation	p.R451W	p.W152X	p.R451W	p.R451W

(P-07)

The Role of Adenovirus Serotype 36 in Childhood Obesity

Tamer Şanlıdağ[1], Burçin Şanlıdağ[2], Ayşe Arıkan[3], Neşe Akcan[4], Rüveyde Bundak[5], Murat Uncu[6], Nerin Bahçeciler Önder[2]

[1]Near East University Experimental Health Sciences Research Center, Nicosia, Turkish Republic of Northern Cyprus

[2]Near East University Faculty of Medicine, Department of Pediatrics, Nicosia, Turkish Republic of Northern Cyprus

[3]University of Kyrenia Faculty of Medicine, Department of Medical Microbiology, Kyrenia, Turkish Republic of Northern Cyprus

[4]Near East University Faculty of Medicine, Department of Pediatric Endocrinology, Nicosia, Turkish Republic of Northern Cyprus

[5]Girne University Faculty of Medicine, Department of Pediatric Endocrinology, Kyrenia, Turkish Republic of Northern Cyprus

[6]Near East University Faculty of Medicine, Department of Biochemistry, Nicosia, Turkish Republic of Northern Cyprus

This study aimed to determine the role of Adenovirus 36 (Adv 36) in childhood obesity and to evaluate the obesity-triggering effect of its latent infection on adipose tissue.

The study group was composed of 31 obese children who were admitted to the pediatric endocrinology outpatient clinic, while the control group comprised 30 non-obese children without any chronic disease. In obese children, both an adipose tissue sample and blood samples were obtained, while only blood samples were obtained in control subjects. The adipose tissue samples were taken by a needle aspiration procedure from the subcutaneous tissue of abdomen in obese children. Besides biochemical tests, Adv 36 specific antibody and viral DNA in blood samples were investigated in all subjects, while viral nucleic acid with real-time PCR from adipose tissue was investigated only in obese subjects.

SGPT, triglyceride, and insulin levels were higher in the obese group. There was no case with a positive result of Adv 36 antibody in the control group, while the seropositivity rate for Adv 36 was 13% among the obese children. Regarding the latent Adv 36 infection, there was no positive PCR result from the adipose tissue samples in obese children.

There was a high serological evidence of Adv 36 infection in obese individuals. However, the results of PCR in adipose tissue could not show the presence of latent infection among obese children in the current study. Thus, further studies are needed to evaluate the possible associations between Adv 36 and development of childhood obesity.