

Cardio-metabolic parameters in non-functional adrenal adenoma

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Background

The relationship between metabolic dysfunction and non-functional adrenal adenoma is not clearly defined, yet. There are still few studies about the association between cardiovascular disease and adrenal adenoma. Therefore; the aim of the present study was to evaluate cardio metabolic risk factors in patients with non-functional adrenal adenoma.

Methods

We studied thirty newly diagnosed adrenal adenoma patients and 30 healthy participants. The patients had been referred to the Endocrinology outpatient clinic at the Haseki Training and Research Hospital during the period between October 2014- June 2015. Fasting glucose, insulin, lipid, hormone profile were evaluated from each patient.

Results

The frequency of diabetes mellitus and hypertension were statistically higher in adrenal adenoma group. Lipid profile was similar between groups. Mean fasting glucose, insulin, HOMA-IR, triglyceride and uric acid levels were higher in adrenal adenoma group compared with the control group, however; the differences did not reach statistical significance. Mean hsCRP and CIMT were significantly higher in adenoma group.

	Patients	Control	p
Age	53.66±8.99	47.27±9.37	0.075
BMI	25.32±4.33	25.36±5.36	0.314
Diabetes mellitus (% , n)	13 (43.3%)	5 (16.7%)	0.024
Hypertension (% , n)	13 (43.3%)	4(13.3%)	10 0.0
Fasting Glucose , mg/dl	109.50±36.36	96.76±15.02	0.084
Insülin, µ IU/mL	10.76± 6.38	8.71±4.91	0.170
HOMA-IR	2.95± 2.00	2.12±1.35	0.065
Total cholesterole, mg/dL	201.26±36.34	216.80±47.89	0.163
Triglyceride, mg/ dL	134.13±57.00	124.06±50.47	0.472
HDL-C, mg/ dL	47,93±9.29	49.26±10.35	0.602
LDL-C, mg/ dL	126.33±35.45	142,60±39.49	0.099
hsCRP, mg/L	4.83±3.52	2.92±2.48	0.019
Urik acid, mg/ dL	5.76±0.91	5.05±1.23	0.060
CIMT, mm	0.70±0.11	0.54±0.06	<0.001

Table 1: Clinical features and biochemical parameters of groups

Conclusion

Cardio metabolic risk factors were found to be higher in non-functional adrenal adenoma. Therefore; patients with adrenal adenoma should be monitored for cardiovascular disease.

References

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