

THE RELATIONSHIP BETWEEN THE EXISTENCE AND DEGREE OF CORONARY ARTERY DISEASE WITH THE LEVEL OF PARATHORMONE

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AIM

Parathormone (PTH) is one of the major regulator of the bone and mineral metabolism.

Elevated PTH levels in patients with primary

and secondary hyperparathyroidism is thought to have negative effects on the cardiovascular system. The existence and degree of coronary atherosclerosis were evaluated with Gensini Score from images of angiograms.

SPSS 13.0 was used for statistical analyze.

In our study, we aimed to investigate a possible relationship between plasma PTH levels and coronary atherosclerosis.

METHODS

Fourty two men and 35 women, a total of 77 patients were included the study who admitted cardiology clinic because of chest pain.

The patients had no previously known coronary artery disease. The patients who use a drug or have a disease which can affect calcium or PTH levels were excluded.

Plasma lipids, calcium, phosporus, albumin, intact PTH and 25-OH vitamin D levels were measured from the blood samples which

RESULTS

When the all risk factors are evaluated we found no relationship between the existence and degree of coronary atherosclerosis and levels of PTH and 25-OH vitamin D levels.

Also when we divided patients into tertil by Gensini score, we didn't find any relationship between groups.

A limitation of this study was the fact that most of the patients have low Gensini score.

CONCLUSION

There is no relationship between the existence and degree of coronary atherosclerosis and PTH/25-OH vitamin D levels in our cross-sectional study.

Other studies which consider chronic process of atherosclerosis are needed.

were taken one hour before the angiography procedure following a 8 hours fasting

	Gensini>20	Gensini<20	p value
PTH (pg/ml)	49,39	52,14	0,51
D vit (ng/ml)	22,91	18,92	0,019
Calcium (mg/dl)	9,72	9,56	0,003

References

Smith JC, Page MD, John R, Wheeler MH, Cockroft JR, Scanlon MF, et al.
Augmentation of central arterial pressure in mild primary
hyperparathyroidism. J Clin Endocrinol Metab 2000; 85: 3515-3519.
Neunteufl T, Katzenschlager R, Abela C, Kostner K, Niederle B, Weidinger F, et
al. Impairment of endothelium-independent vasodilatation in patients
with hypercalcemia. Cardivasc Res 1998; 40:396-401
Piovesan A, Molineri N, Casasso F, Emmolo I, Ugliengo G, Cesario F, Left
ventricular hypertrophy in primary hyperparathyroidism. Effects of
successful parathyroidectomy. Clin endocrinol 1999; 50:321-328
Stefenelli T, Mayr h, Bergler-Klein J, Globits S, Woloszczczuk W, Niederle B.
Primary hyperparathyroidism: incidence of cardiac abnormalities and
partial reversibility after successful parathyroidectomy Am J Med 1993;
95: 197-202