

A Case of Primary Hypothyroidism Initially Presenting with Massive Pericardial Effusion

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Objectives:

Although pericardial effusion is a common finding in primary hypothyroidism, massive pericardial effusion or pericardial tamponade are rare. Herein, we describe a newly diagnosed case of primary hypothyroidism initially presenting with massive pericardial effusion.

Case Report

Case report: A 64 years old male patient attended to the emergency unit with worsening dyspnea over the past 1 month. ECG showed a low voltage QRS wave. Chest x-ray showed increased cardiothoracic index. No infiltration observed in the lung parenchyma. Massive pericardial effusion diagnosed by Echocardiography and ejection fraction was measured 60%. Pericardiocentesis was performed and a total of 2800 cc of fluid was evacuated. Complete blood count, routine biochemical tests and erythrocyte sedimentation rate were normal. No bacterial growth was observed in pericardial fluid samples and cytological examination revealed no findings suggesting malignancy. Also, adenosine deaminase level was normal and no growth occurred in Lowenstein-Jensen medium. Rheumatoid factor, anti-nuclear antibody profile, and viral markers (HIV and HBsAg) were negative. Thyroid function tests were as follows: TSH > 150 mIU/L (N:0.5-4.7), fT4 0.2 ng/dl (N: 0.8- 1.7), fT3 1,2 pg/ml (N:1.8-4.6 pg/ml), antiTPO and anti TG negative. There were no findings in ultrasound examination of the thyroid gland. Consequently, a diagnosis of primary hypothyroidism was made and replacement treatment was initiated with 50 mcg/day of levothyroxine with gradual dose titration. Follow-up examination after 6 months was normal and no pericardial effusion detected by echocardiography.

Results:

Conclusions:

Conclusion: Massive pericardial effusion is a rare complication of hypothyroidism and patients frequently exhibit other signs and symptoms of hypothyroidism before the development of pericardial effusion. However, in the patient described herein, initial presentation involved massive pericardial effusion associated with dyspnea. Physicians should keep in their mind that massive pericardial effusion might precede overt symptoms of hypothyroidism.

References: