

Ectopic Parathyroid Incidentaloma on Tc99m SestaMIBI Myocardial Perfusion Imaging

Abstract

Parathyroid incidentalomas are generally discovered during thyroid surgery.^[1] In the present case, the ectopic parathyroid adenoma was discovered as an incidentaloma in a clinical setting, during the course of clinical evaluation of atypical chest pain by gastroenterology and cardiology.

Keywords: Ectopic parathyroid adenoma, myocardial perfusion imaging, parathyroid incidentaloma

During ^{99m}Tc sestaMIBI-gated Single photon emission tomography (SPECT) Myocardial perfusion imaging (MPI) for the evaluation of atypical chest pain, an anterior mediastinal lesion was discovered [Figure 1]. Dual-phase ^{99m}Tc sestaMIBI parathyroid imaging [Figure 2] was carried out, which has shown the retention of radiopharmaceutical in the anterior mediastinal lesion, suggesting ectopic parathyroid adenoma. On further investigation, Computed tomography (CT) scan of the chest [Figure 3] has confirmed 3.2 × 2.3 × 2 cm ectopic parathyroid adenoma in the anterior–superior mediastinum.

The term “parathyroid incidentaloma” is used to indicate unexpected parathyroid adenomas that are encountered during surgery.^[2,3] The incidental discovery of parathyroid tumors was first reported by Attie *et al.* in 1967^[1] while he was exploring the neck. It is a

rare entity and till now approximately 50 cases have been reported worldwide.^[5] With the advent of high-resolution ultrasound

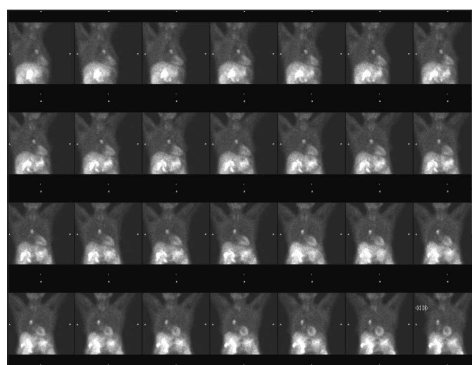


Figure 2: ^{99m}Tc sestaMIBI dual-phase scintigraphy

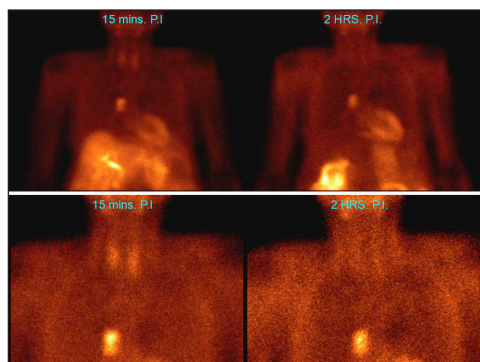


Figure 1: ^{99m}Tc sestaMIBI MPI GSPECT projection images



Figure 3: CT scan chest ectopic parathyroid adenoma

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examination for thyroid lesion, parathyroid incidentaloma may be revealed prior to surgery.^[4]

In the present case, patient was being investigated for atypical chest pain by gastroenterology and later by cardiology departments. Upper Gastrointestinal (GI) endoscopy was normal. During the course of cardiac evaluation, MPI with ^{99m}Tc sestamibi, which was negative for inducible ischemia, has suggested the unsuspected ectopic parathyroid adenoma and further directed clinical management.

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Conflicts of interest

There are no conflicts of interest.

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