



Case Report

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Positional Change of Hepatic Pseudolipoma: a Case Report

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Pseudolipoma of Glisson's capsule is a rare benign fatty mass that develops in the subcapsular space of the liver, typically at the interface between the diaphragm and the liver. Histologically, it resembles an epiploic appendage. This report describes a case in which a newly formed hepatic pseudolipoma migrated during follow-up. Positional changes in pseudolipomas are exceedingly rare, with only one other case documented in the literature. This case supports the hypothesis that a lipomatous mass originating from an epiploic appendage can migrate between the serosa of the liver and Glisson's capsule, eventually forming a pseudolipoma. We present this case to provide valuable insights into the limited literature on this rare phenomenon.

Keywords: Liver, Lipoma, Tomography

Introduction

Pseudolipoma of Glisson's capsule is a rare benign condition, with an incidence of 0.2%, occurring in the subcapsular space of the liver. It is characterized by encapsulated degenerative fat. This lesion is believed to develop when the epiploic appendage detaches and adheres to the liver capsule. In this report, we present the case of a 69-year-old female patient who developed a hepatic pseudolipoma that was observed to migrate during routine chest computed tomography (CT) follow-up scans for a pulmonary nodule. To date, there has only been one other reported case of a migrating hepatic pseudolipoma. This report discusses her case in detail and provides a review of the relevant literature.

Case reports

A 69-year-old female patient came for evaluation of an incidentally discovered pulmonary nodule. Her initial physical examination and vital signs were unremarkable. The patient had no significant medical history aside from a right knee replacement due to osteoarthritis, and she reported no history of abdominal surgery or trauma.

A non-contrast chest CT scan conducted upon admission showed no notable abdominal findings. However, pulmonary findings included multiple nodules, calcifications, and bronchiectasis, along with enlarged and calcified mediastinal lymph nodes.

Six months later, a follow-up chest CT revealed a new 1.4 cm nodule with fat density (-89 HU) in the liver's posterolateral aspect (Fig. 1A, 1B). The patient remained asymptomatic concerning any abdominal complaints.

Fourteen months after the initial evaluation, another chest CT scan showed that the previously identified nodule, suspected to be a hepatic pseudolipoma, had migrated to the posteromedial aspect of the liver without significantly

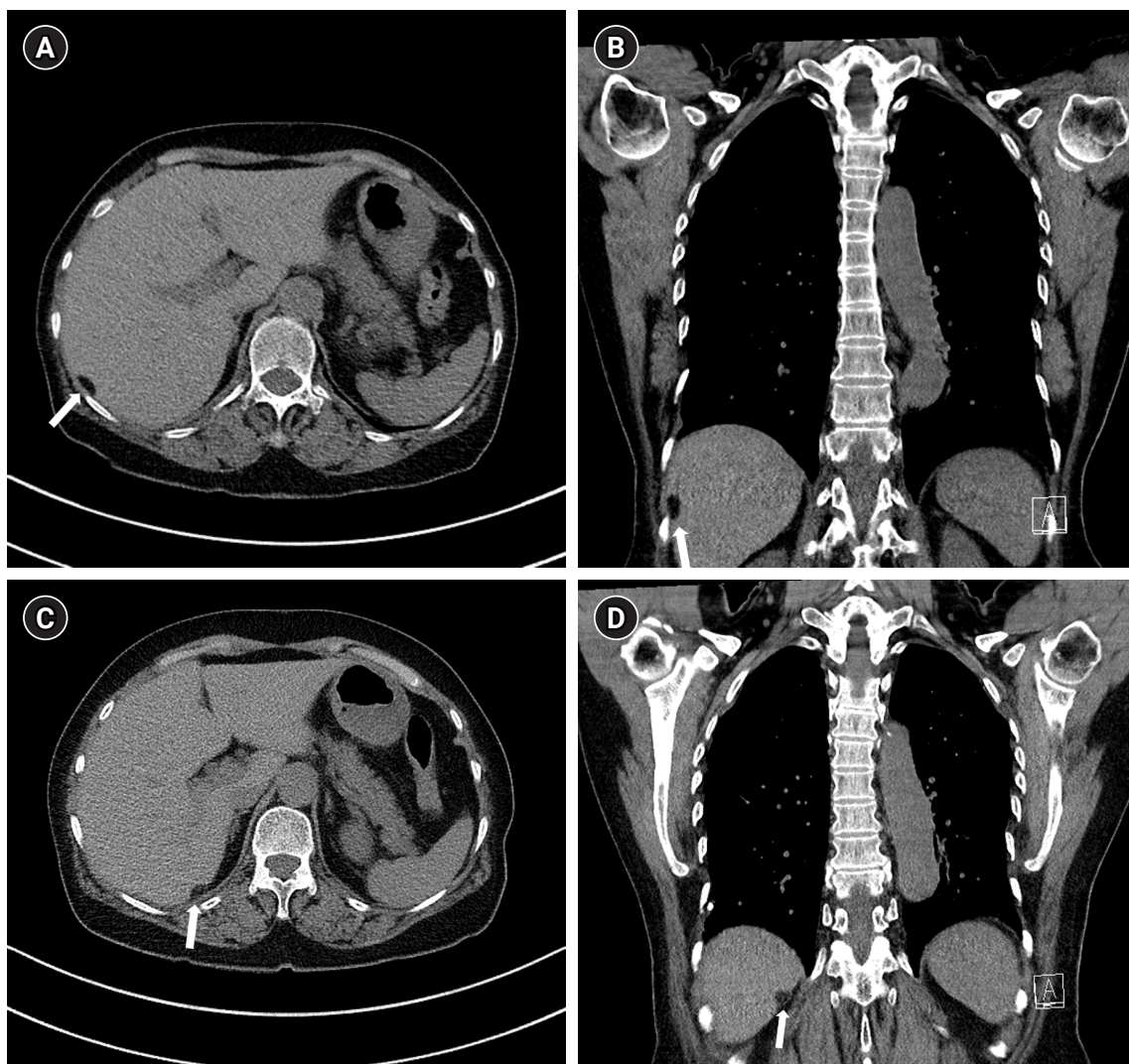


Fig. 1. Chest computed tomography (CT) images of a 69-year-old female. The axial (A) and coronal (B) non-enhanced chest CT images were obtained. These images reveal the emergence of a fat-attenuating ovoid nodule located on the posterolateral aspect of the liver (indicated by the arrow). About 8 months after the previous CT scans, axial (C) and coronal (D) non-enhanced chest CT images were taken. In these images, the fat-attenuating ovoid nodule has shifted to the posteromedial aspect of the liver (also indicated by the arrow).

changing size (Fig. 1C, 1D).

Discussion

Pseudolipoma of the liver was first described by Rolleston in 1891 as a mass of degenerative fat surrounded by the liver capsule [1,2]. CT imaging usually shows a well-defined nodule with fat attenuation on the liver surface [3-5]. It mainly affects middle-aged male, with some studies suggesting a possible link to trauma or previous surgeries [6]. This case report discusses a hepatic pseudolipoma that developed and migrated during the follow-up period. Pseudolipomas are typically

found on the diaphragmatic surface of the liver and have a histological appearance similar to that of epiploic appendages. In this instance, the lesion was initially located on the posterolateral aspect of the liver and later migrated to the posteromedial aspect. This observed migration supports the hypothesis that a lipomatous mass originating from an epiploic appendage can move between the serosa of the liver and Glisson's capsule, ultimately forming a pseudolipoma [7].

Differentiating hepatic pseudolipoma from other conditions, such as serosal metastasis or fibrosing subcapsular necrotic nodules, is crucial due to their overlapping imaging features [4]. The mobility observed in this case is a distinct

feature that may help differentiate pseudolipomas from other conditions in challenging situations. However, due to the rarity of such occurrences, further studies and additional case reports are needed to understand better the clinical significance and implications of the movement of pseudolipomas. This case highlights that hepatic pseudolipomas can migrate over time, potentially improving our understanding of their pathogenesis and assisting in future differential diagnoses.

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Ethics approval

This study was approved by the Institutional Review Board of the Dongsan Medical Center (IRB File No. 2024-06-052, July 5, 2024).

Conflict of interest

The authors have nothing to disclose.

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