



中华医学会核医学分会第十一届委员会 技术与继续教育学组

北京继续教育疑难病例分析展示

Interesting and Unusual Cases (13-18)

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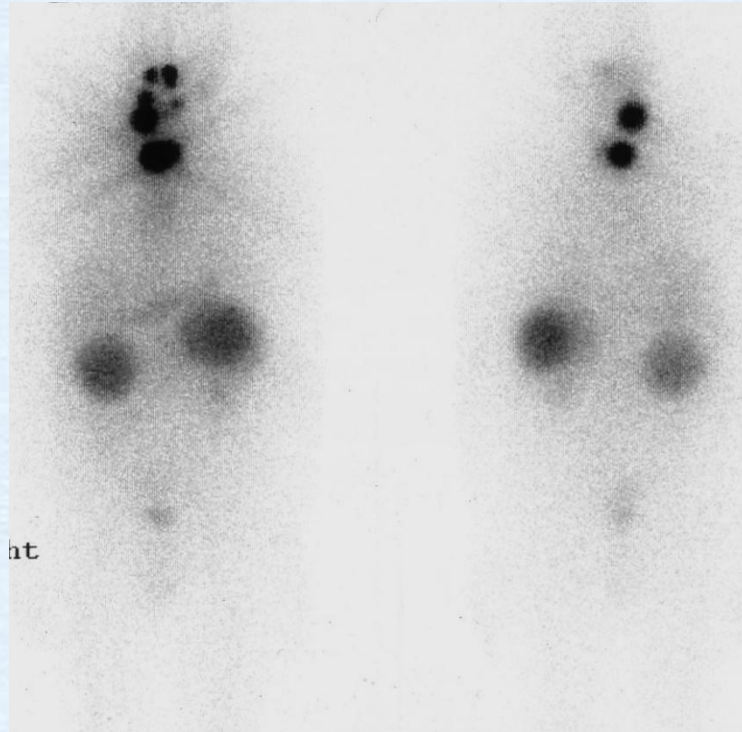


Case # 13



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62 year old man who is 2 months post total thyroidectomy for an invasive papillary carcinoma with multiple positive lymph nodes

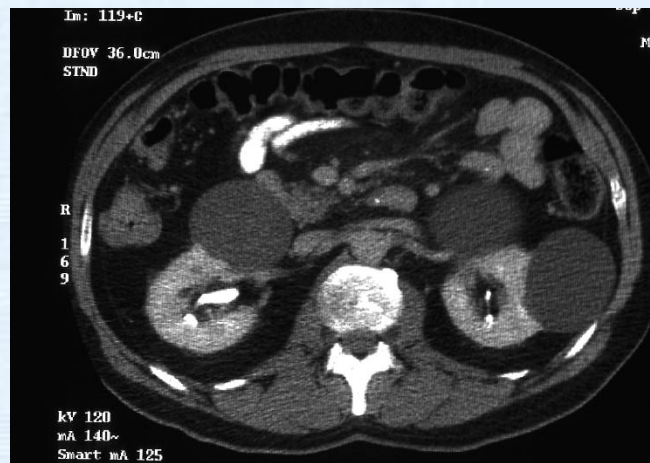
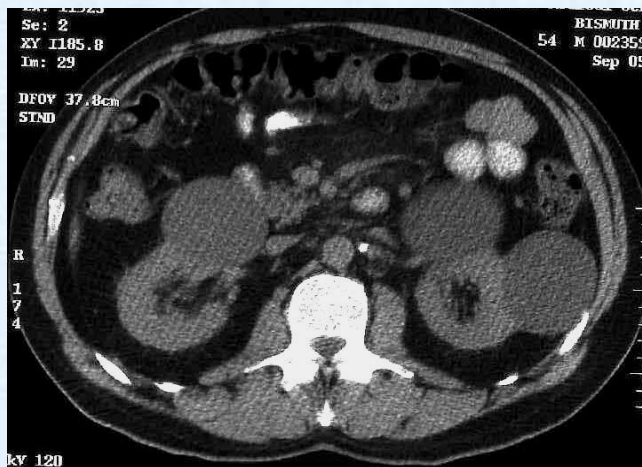


7 Days post 150 mCi of I-131



What is the most likely diagnosis ?

- A---abdominal lymph node metastases
- B---uptake in bowel diverticuli
- C---uptake in renal cysts
- D---bilateral breast uptake





False-Positive Iodine-131 Body Scan Caused by a Large Renal Cyst

MICHAEL B. BRACHMAN, M.D., BARRY J. ROTHMAN, M.D., LALITHA RAMANNA, M.D.,
DOINA E. TANASESCU, M.D., HELEN ADELBERG, M.D., AND ALAN D. WAXMAN, M.D.

Focal I-131 accumulation is generally a reliable indicator of functioning thyroid tissue or a differentiated thyroid cancer metastasis. Normal accumulation of activity may be seen in areas such as the intestinal tract.

From the Departments of Nuclear Medicine and Diagnostic Radiology, Cedars-Sinai Medical Center, Los Angeles, California

Post-Therapy Iodine-131 Localization in Unsuspected Large Renal Cyst: Possible Mechanisms

Christopher Wen, Elaine Iuanow, Elizabeth Oates, Stephanie L. Lee and Ronald Perrone
Departments of Radiology and Internal Medicine, New England Medical Center and Tufts University School of Medicine, Boston, Massachusetts

Sensitive and specific, whole-body ^{131}I scintigraphy remains an important technique for diagnosing metastases from differentiated papillary or follicular thyroid carcinoma. False-positive ^{131}I localization is well recognized and can occur in a variety of conditions. We present a case of intense ^{131}I localization in a previously unsuspected large renal cyst; the lesion was not visualized on routine preablation diagnostic ^{131}I scintigraphy but was obvious on post-therapeutic whole-body imaging, underscoring the value of post-therapy imaging in detecting abnormalities not apparent on diagnostic studies. Radioiodine within the urinary bladder or, at times, the renal collecting system is expected, because ^{131}I excretion is primarily by glomerular filtration. In the case presented here, ^{131}I

activity within the renal cyst supports the concept that iodide is subject to an active secretory process by the renal tubule.

Key Words: thyroid carcinoma; iodine-131; renal cyst

J Nucl Med 1998; 39:2158-2161

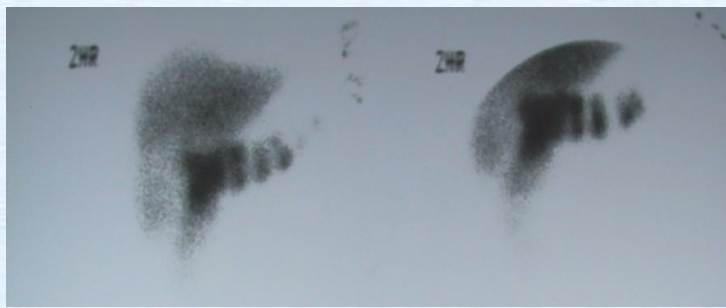
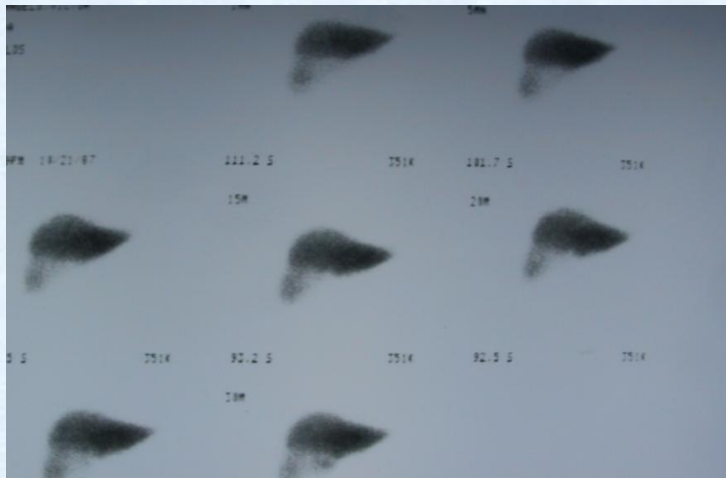
Whole-body ^{131}I scintigraphy and monitoring of thyroglobulin levels remain the mainstays for follow-up of patients with well-differentiated papillary or follicular thyroid cancer. False-positive ^{131}I localization on diagnostic scans has been well documented (1-9); it is important to recognize false-positive sites to avoid unnecessary ablation therapy. Radioiodine localization in a renal cyst during diagnostic ^{131}I imaging has been described (7). We report marked radioiodine activity in an unknown large renal cyst visualized only on the postablation ^{131}I scan.

Received Dec. 3, 1997; revision accepted Apr. 19, 1998.
For correspondence contact: Elizabeth Oates, MD, Division of Nuclear Medicine, Department of Radiology, New England Medical Center, 750 Washington St., NEMC #228, Boston, MA 02111. No reprints available.

Case # 14

44 year old woman with chronic upper abdominal pain and fatty food intolerance

^{99m}Tc -
Mebrofenin
(BRIDA)





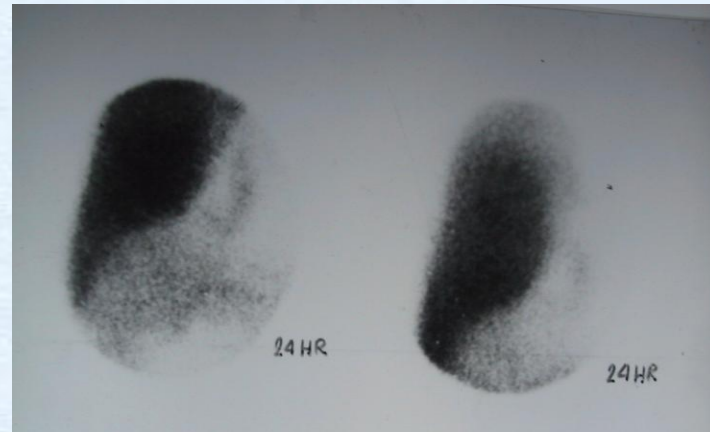
What is the most likely diagnosis ?

- A---cholecysto-colic fistula
- B---common bile duct obstruction
- C---post-operative ileus
- D---co-existant cystic and common duct obstruction

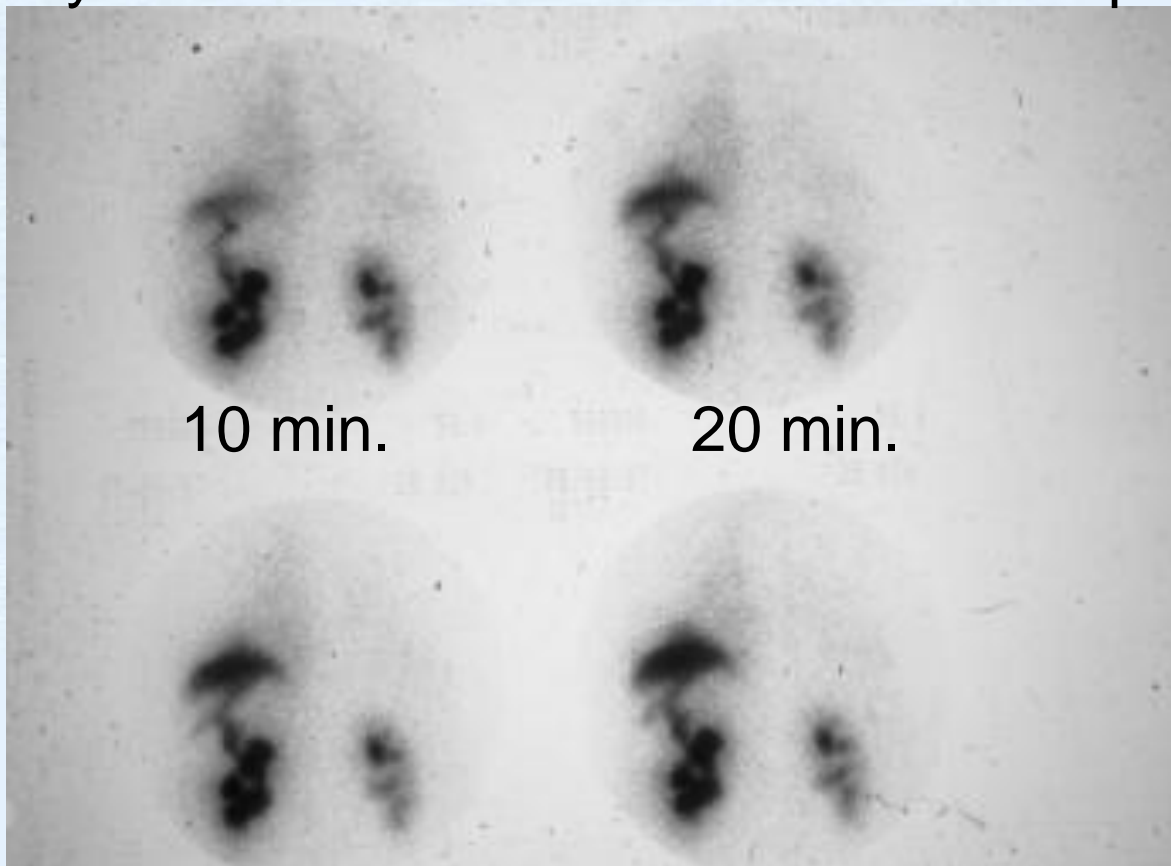
44 year old woman with chronic upper abdominal pain and fatty food intolerance



63 year old chinese man with prolonged jaundice



48 year old man with left obstructive uropathy



30 min.

45 min.

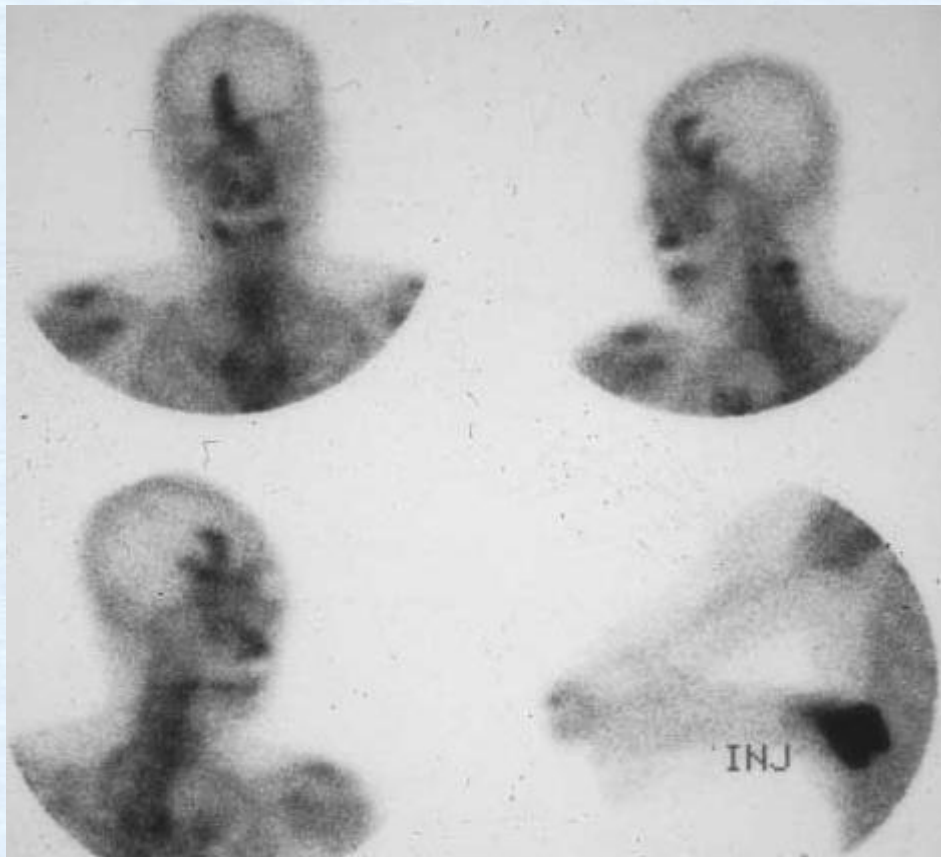


2 hour study



Case # 15

74 year old man with prostate cancer





What is the most likely diagnosis?

- A---Falx calcification
- B---anterior cerebral artery occlusion
- C---calcified meningioma
- D---metastasis from prostate cancer

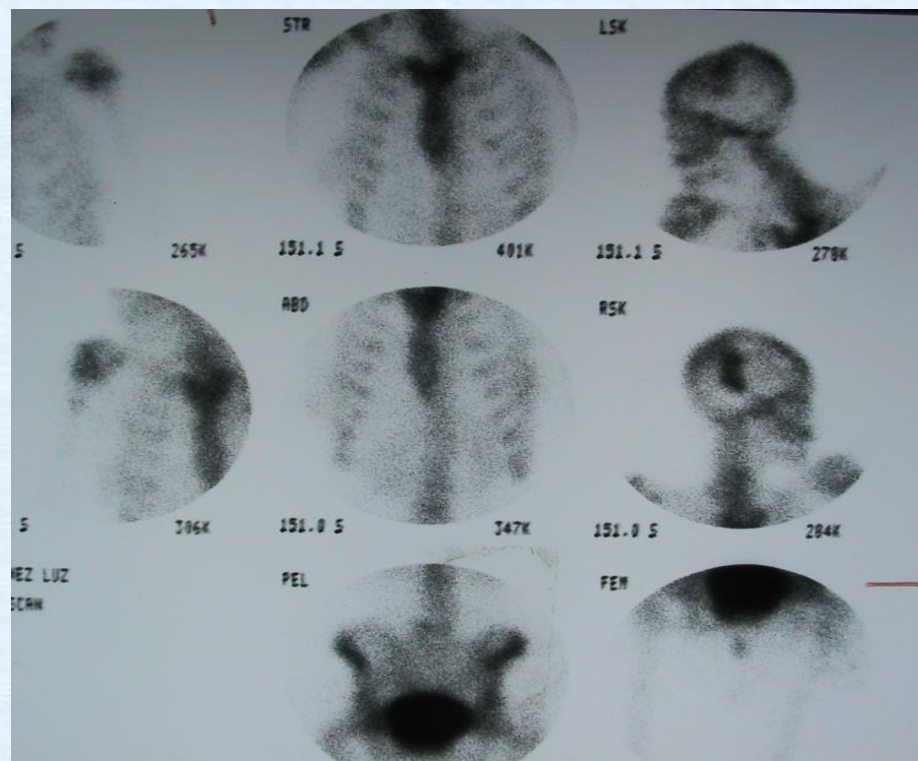
74 year old man with prostate cancer



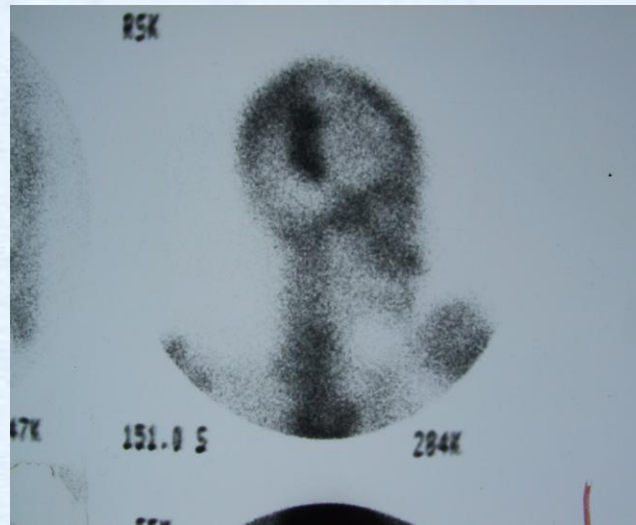
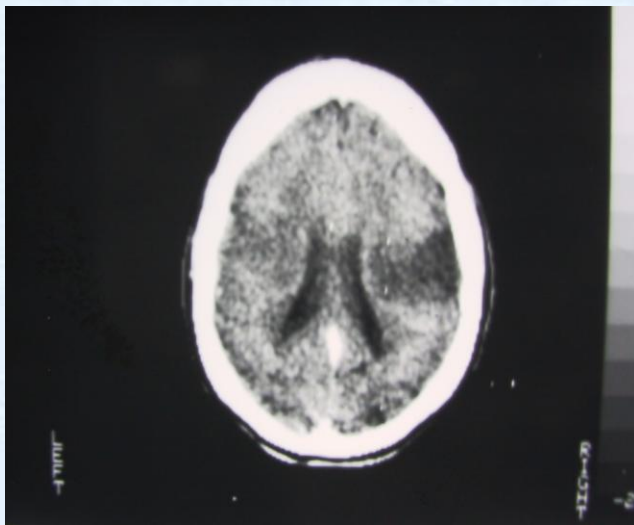
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48 year old woman with breast cancer and headaches

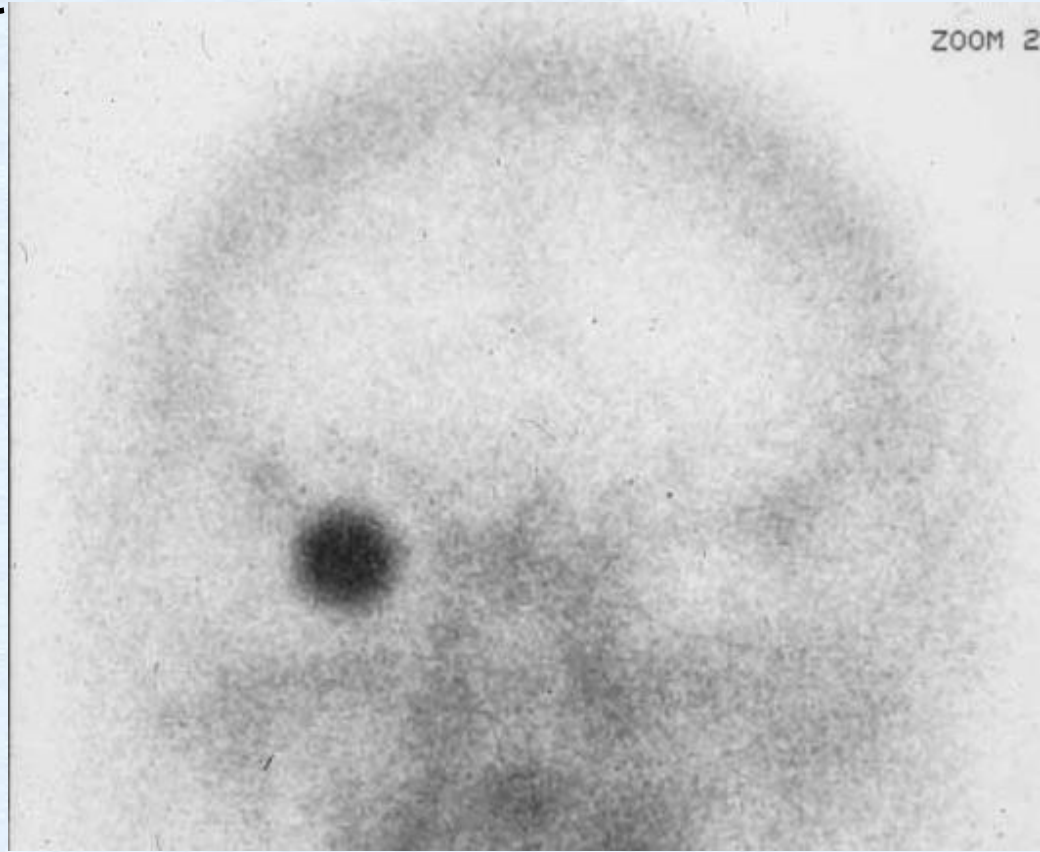


48 year old woman with breast cancer and headaches



Case # 16

32 year old woman with visual problem following car accident



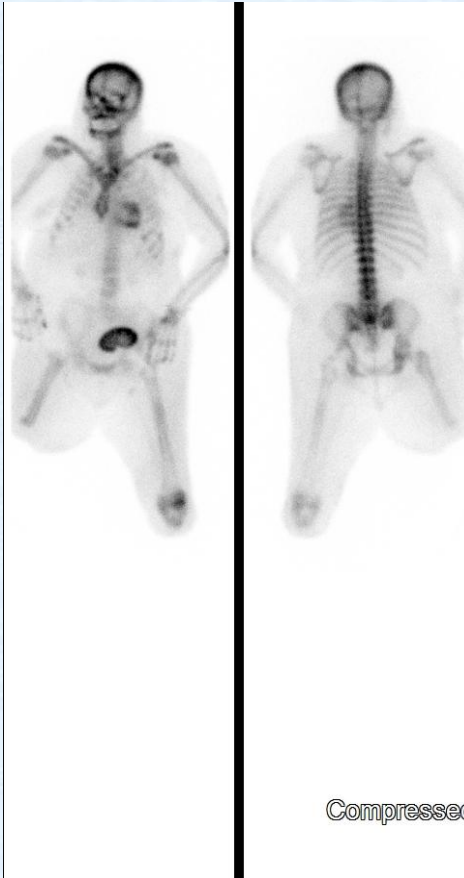


What is the most likely diagnosis ?

- A---prosthetic right eye
- B---absent left eye
- C---calcified orbital hematoma on right
- D---unilateral sarcoid involving lacrimal gland

Case # 17

68 year old diabetic man with bilateral leg amputations



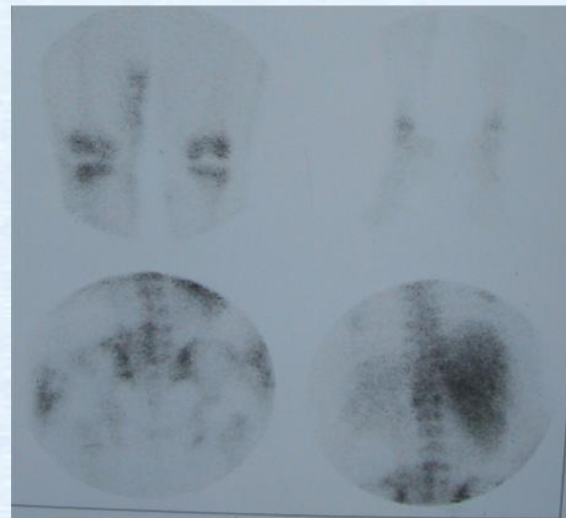
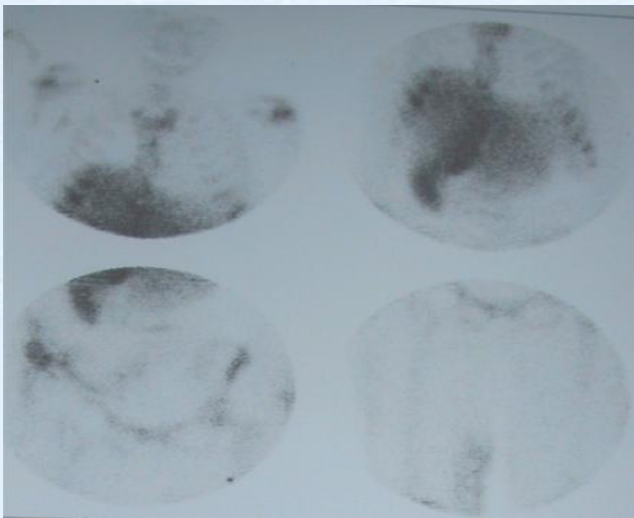
Compressed



What is the most likely diagnosis?

- A---sickle cell disease
- B---amyloidosis
- C---acute myocardial infarct
- D---right to left cardiac shunt
- E---sarcoid

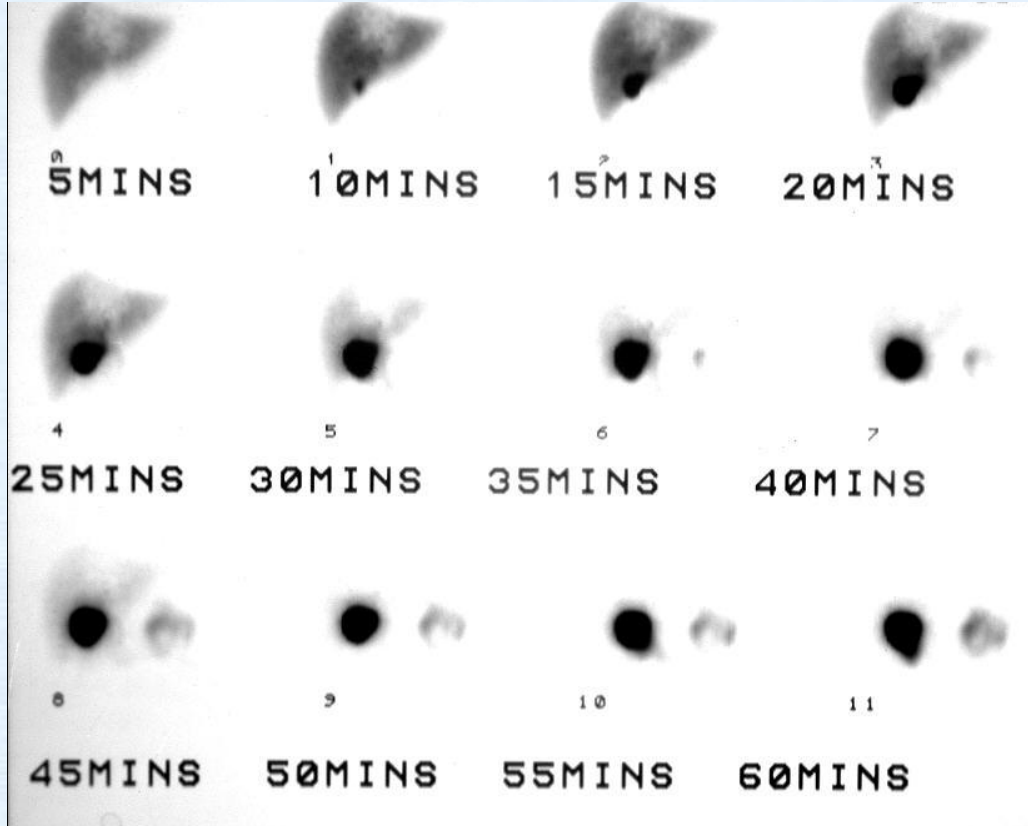
62 year old woman with amyloidosis involving the liver



Case # 18



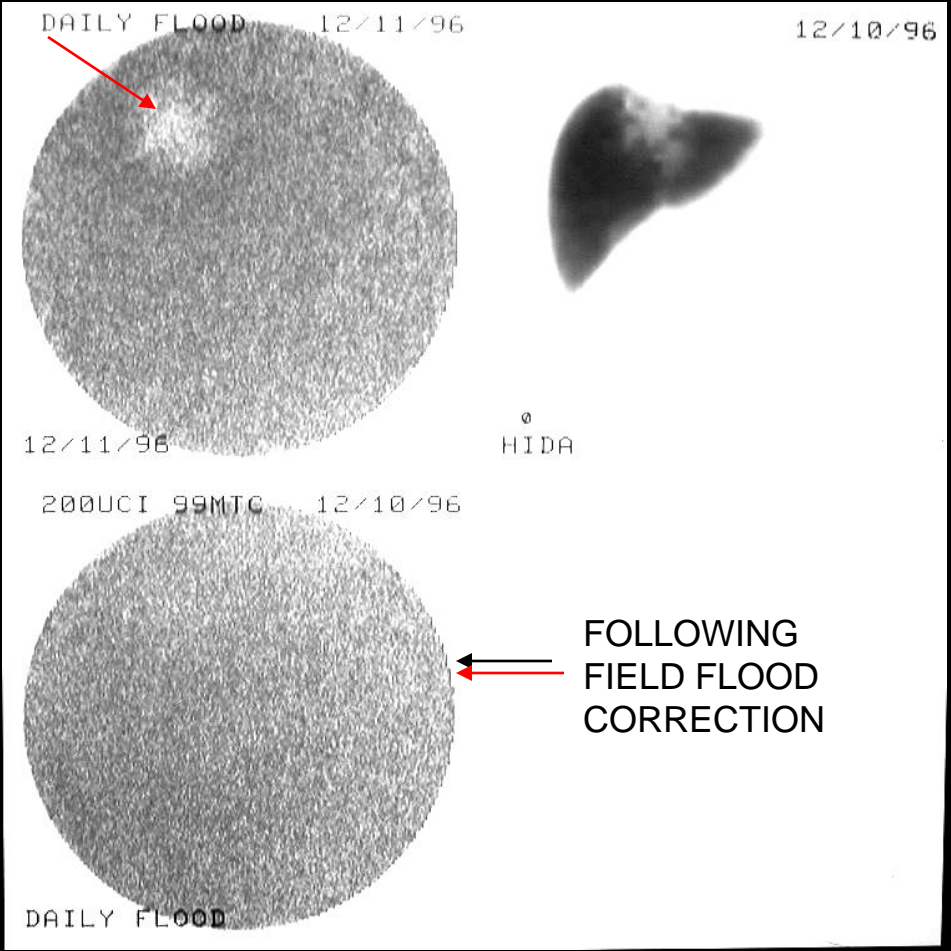
36 year old woman with chronic RUQ discomfort & fatty food intolerance





What is the most likely diagnosis ?

- A---biliary dyskinesia
- B---cystic duct syndrome
- C---cardiac pacemaker
- D---defective phototube



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