Management of Complicated Pancreatitis

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Acute Pancreatitis

- Acute inflammatory process of the pancreas, with variable involvement of other regional tissues or organ systems
- Overall mortality < 5%
- Most cases are mild and self-limited
- 10%-20% have severe diseases
  - Local Complications
    - Pancreatic necrosis, pseudoaneurysms and bleeding, fistulas and strictures
  - Systemic Response
    - SIRS, Organ dysfunction

Pancreatic necrosis

- 15% of patients with severe pancreatitis
- 30%-70% at risk for developing infected pancreatic necrosis (IPN)
- Mortality 19%-24%
- Two-phases (early systemic, late local pancreatic complications)
- IPN is extremely rare before two weeks
- Intervention is essential for cases of IPN
  - Open or MIS necrosectomy, percutaneous drainage (step-up), endoscopic, ?ABX

Goals of Therapy

- Accurate diagnosis and severity scoring
- ICU triage and care in order to treat SIRS and organ dysfunction
- Appropriate imaging and monitoring for local complications
- Nutritional support
- Accurate diagnosis of IPN
- Appropriate timing and intervention for IPN
- Clinicians must exercise patience and avoid iatrogenesis (ABX, drainage of sterile collections)

Indications for Open Necrosectomy

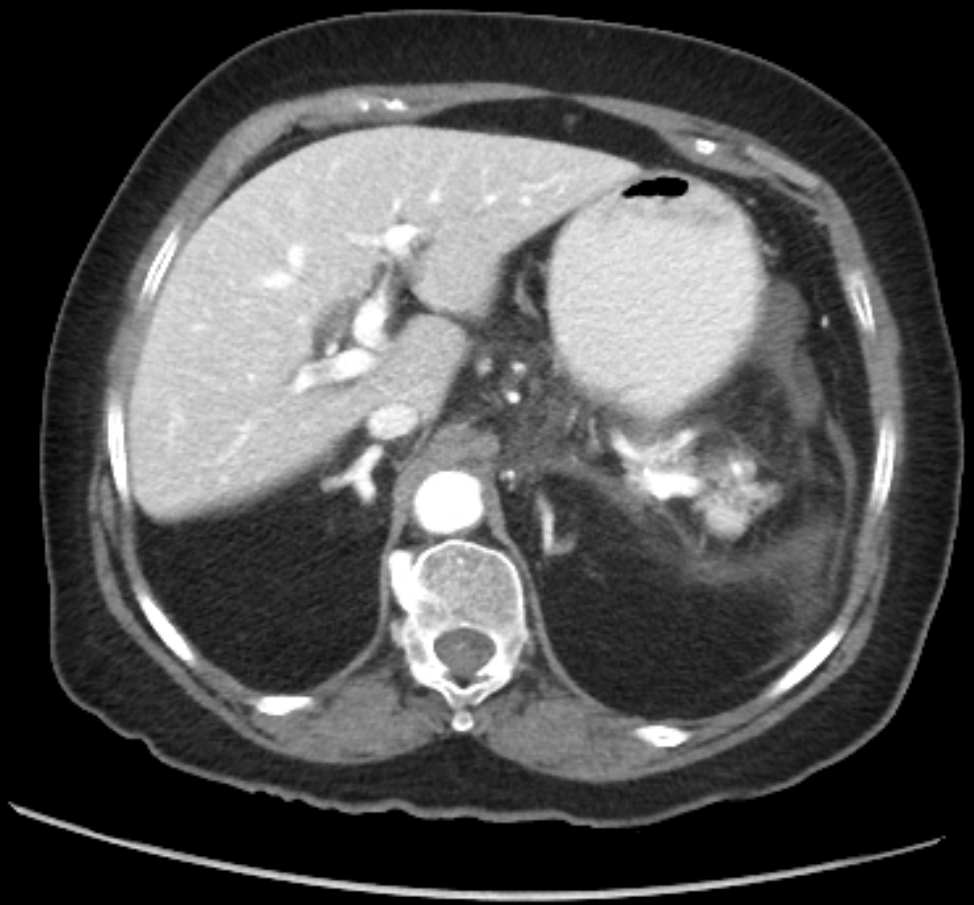
- Lack of equipment or expertise in performing advanced minimally invasive techniques
- Complications of pancreatitis mandating an open surgical approach such as intestinal perforation or necrosis
- Salvage therapy for patients who fail or suffer complications of alternative techniques

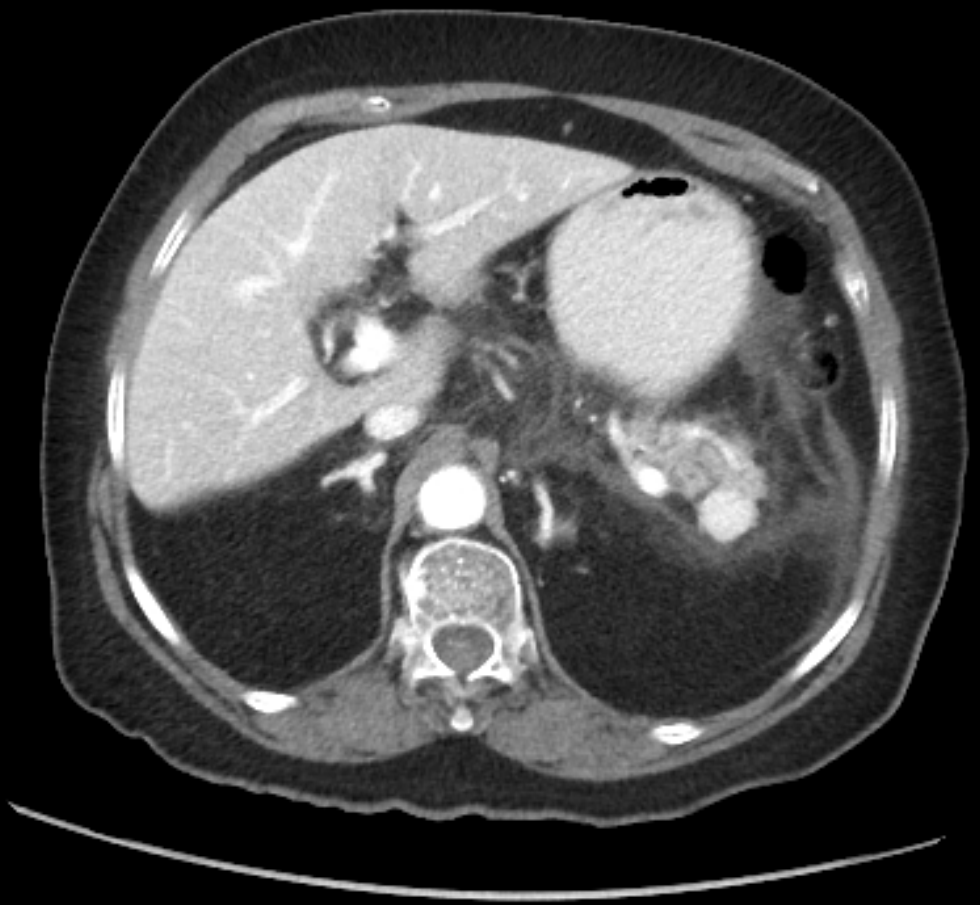
Recent Advances

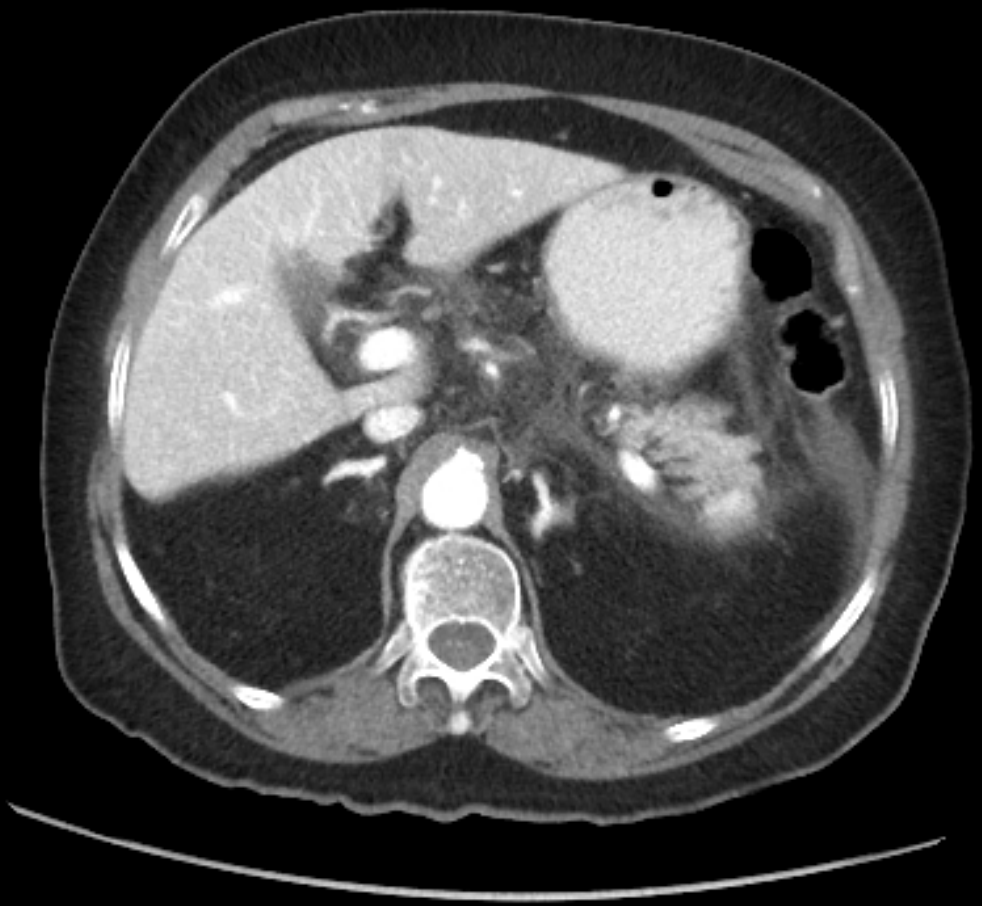
- Early Resuscitation
- Nutritional Support
- Percutaneous catheter drainage/MIS necrosectomy
- Endoscopic drainage/necrosectomy

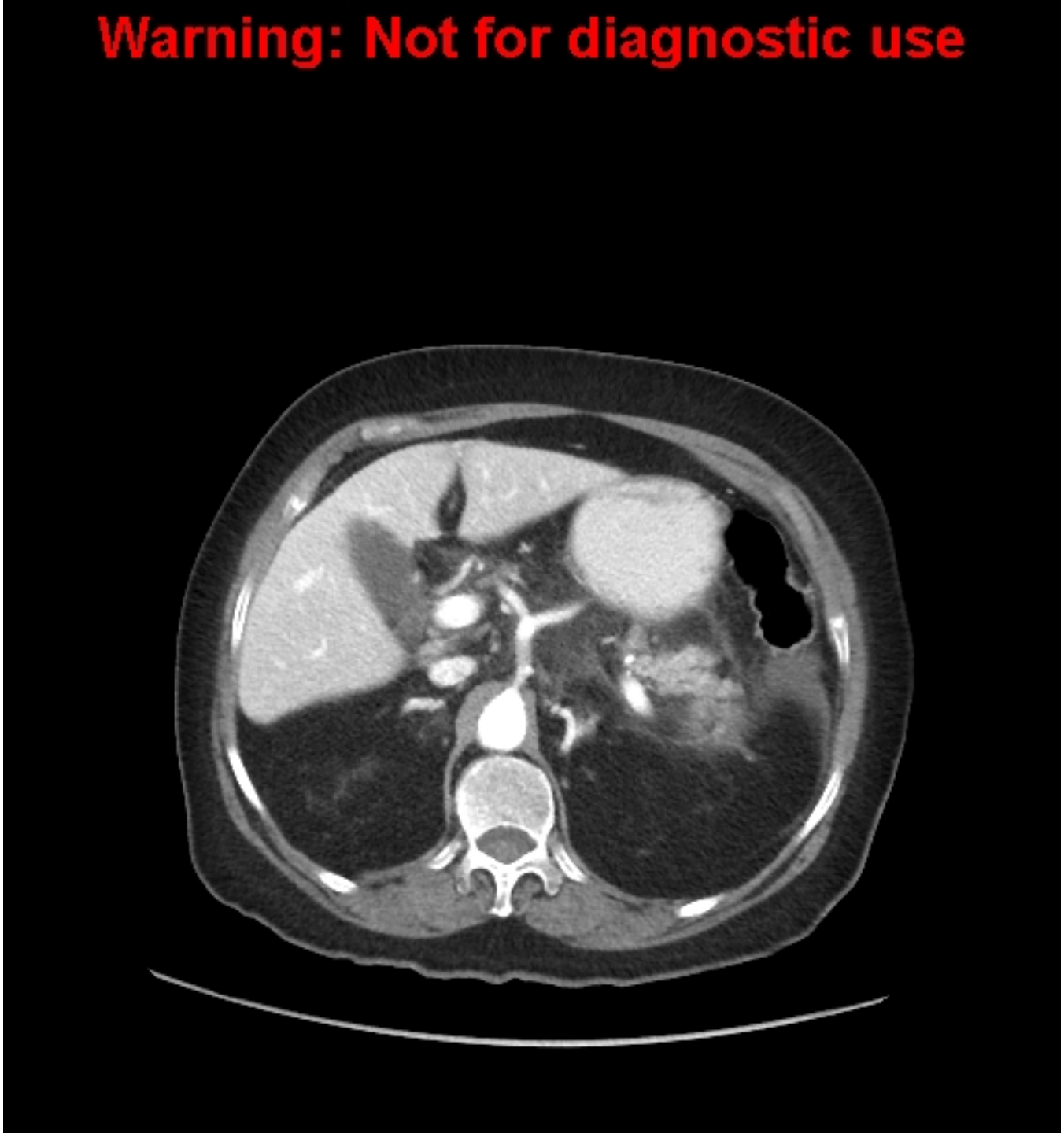
Case Presentation

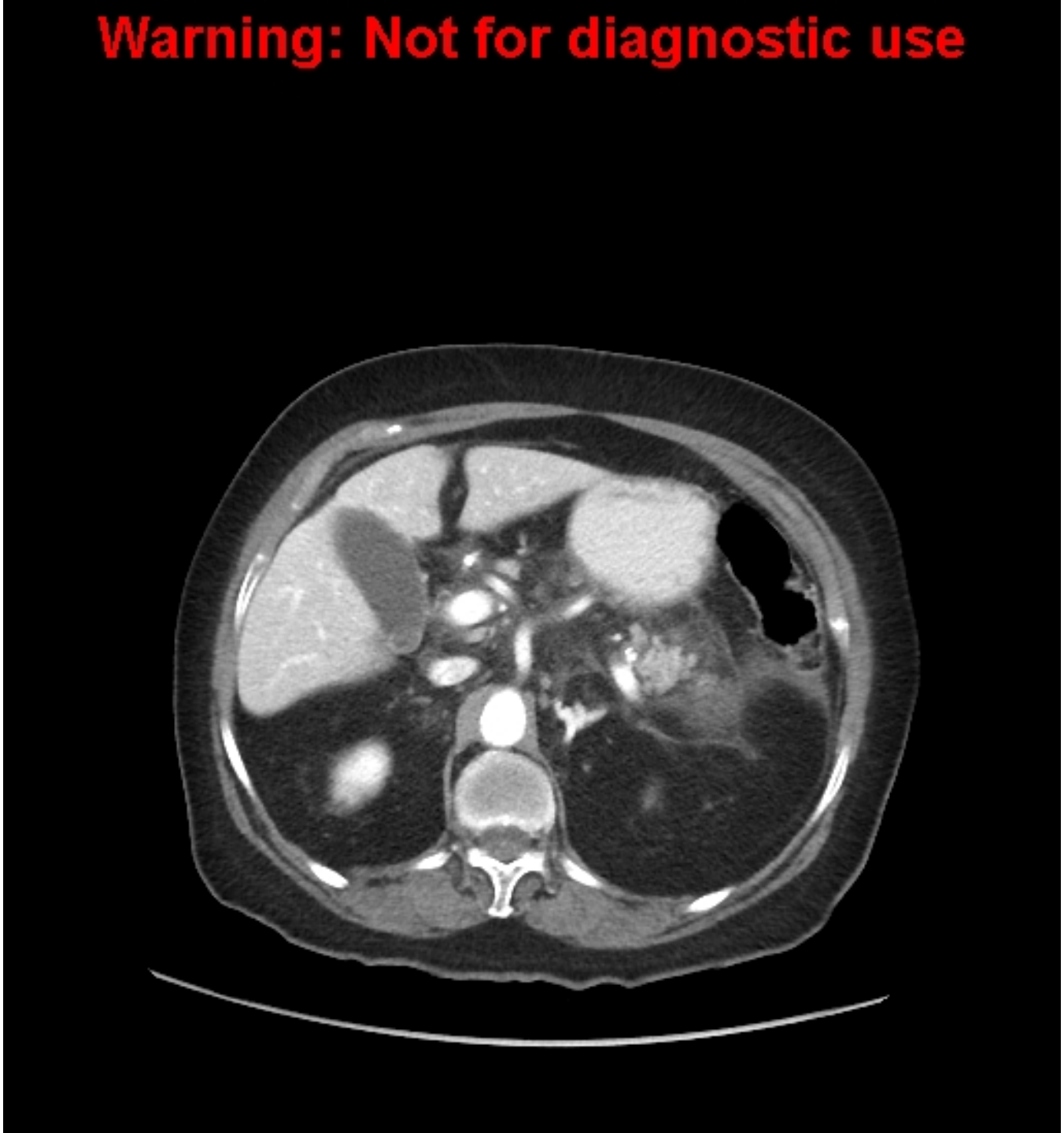
- 75-year-old female (HTN, HLD, CVA, A-fib)
- 24-hr history of abdominal pain
- Lipase 26,000
- WBC 19
- No fevers, but intermittent tachycardia related to a-fib
- No organ failure

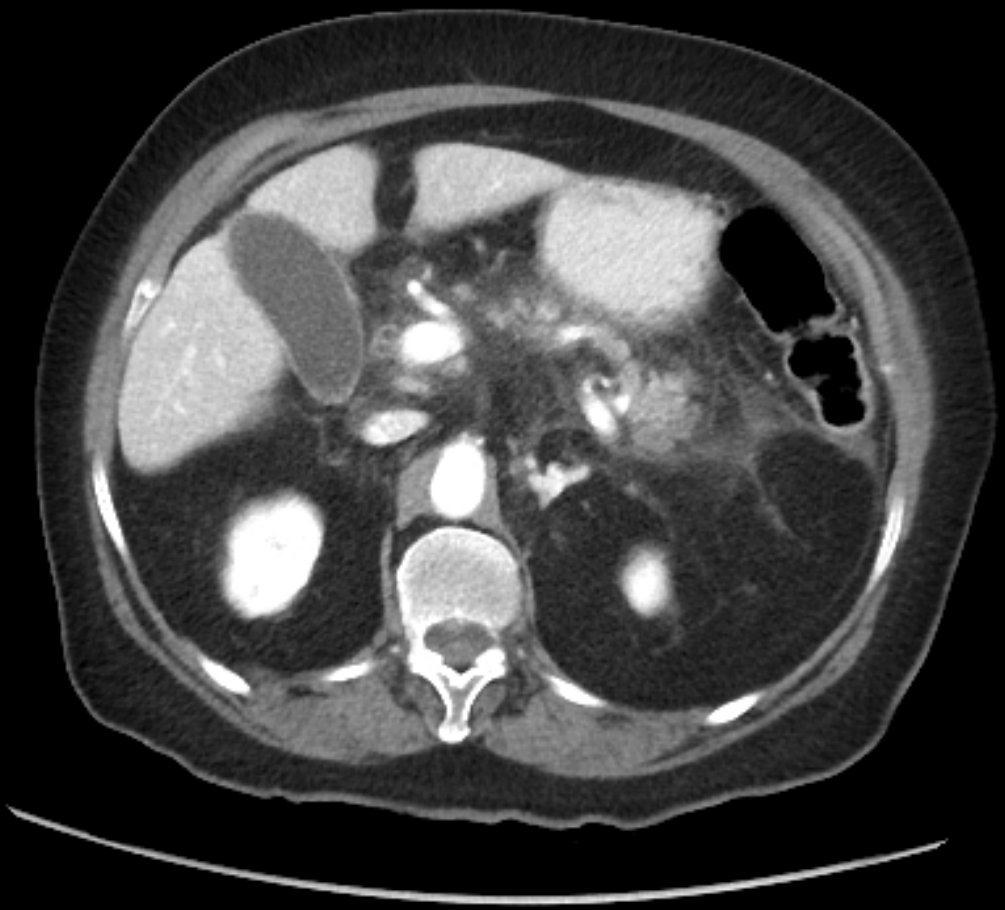


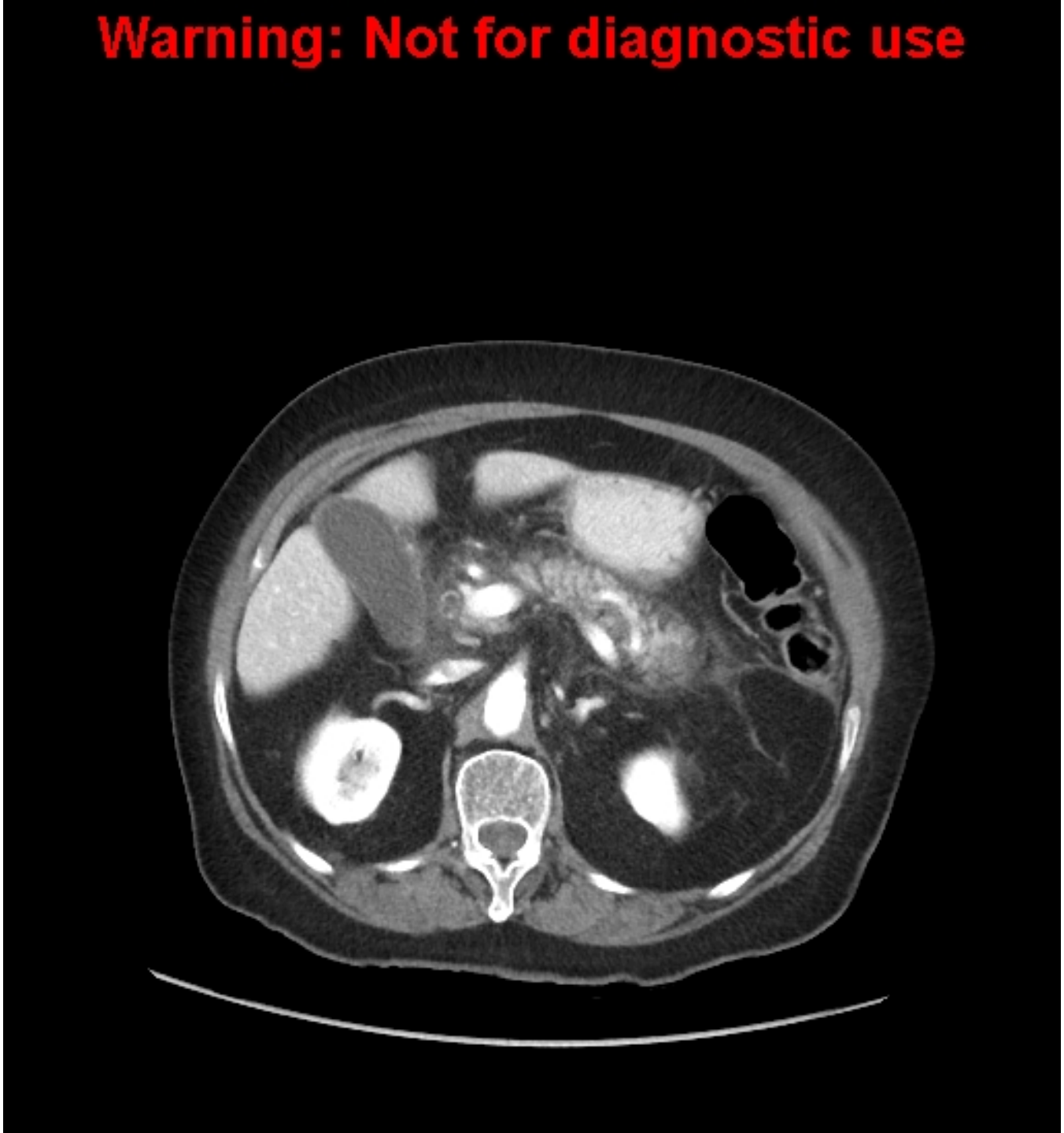


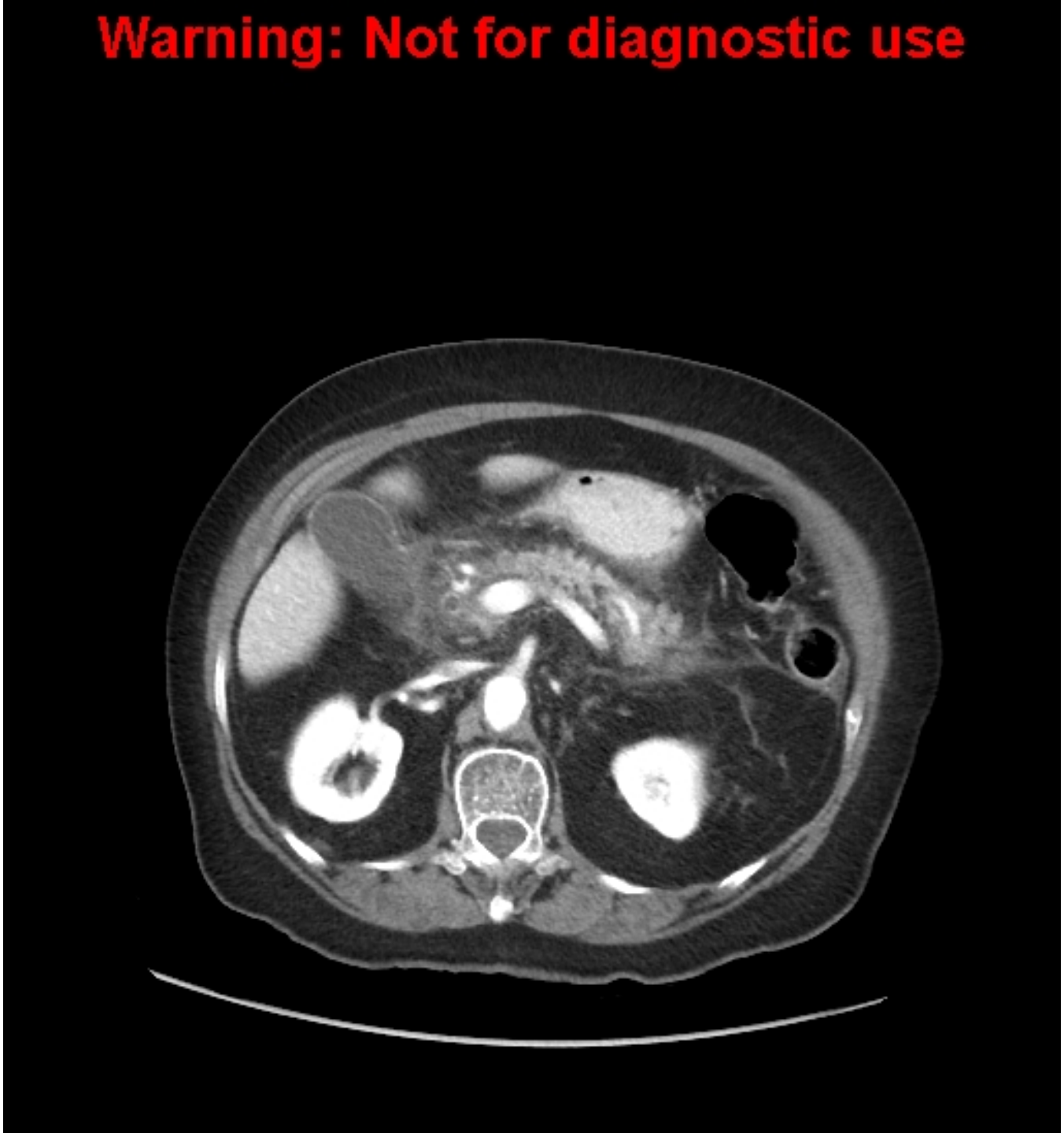


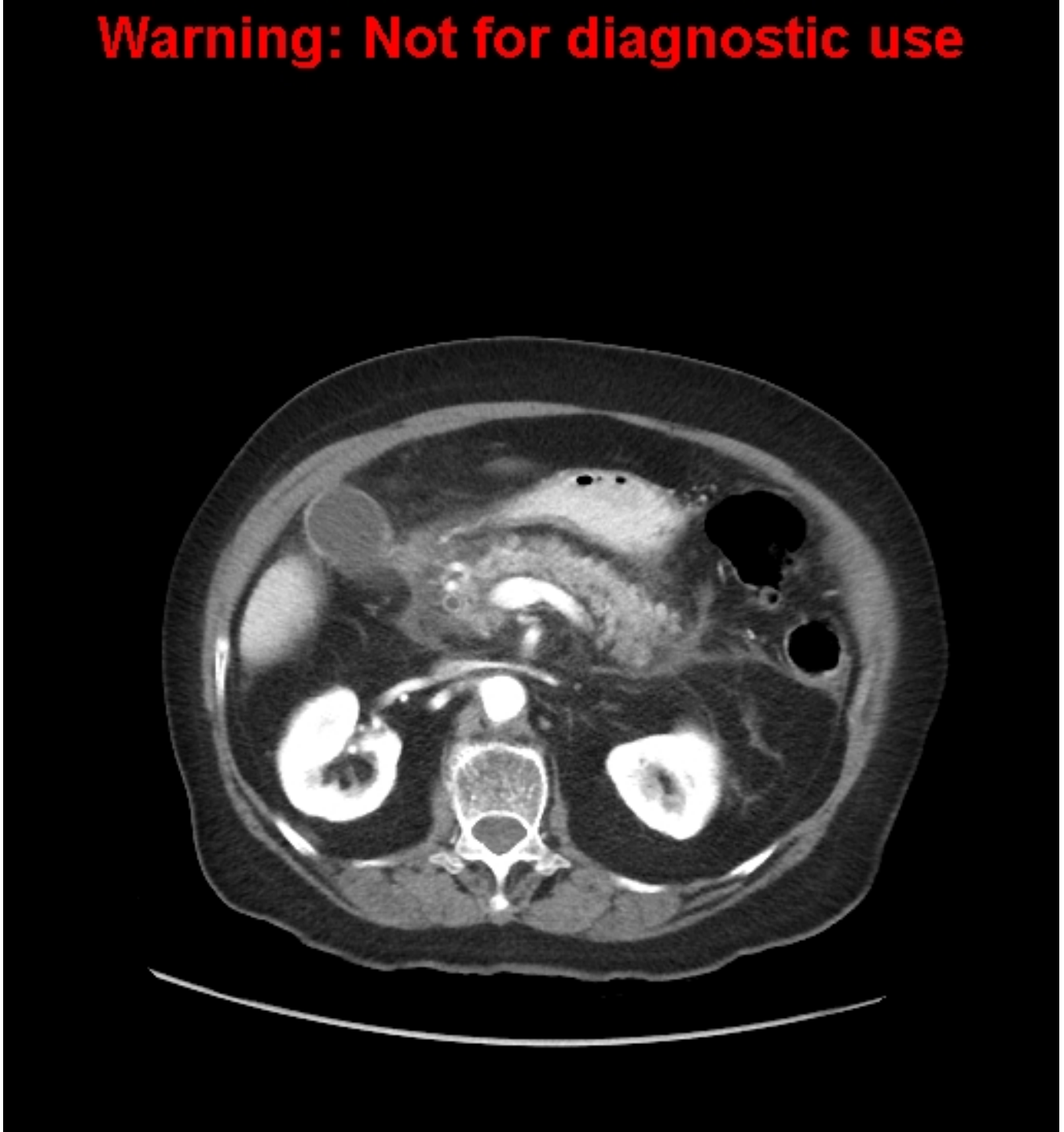








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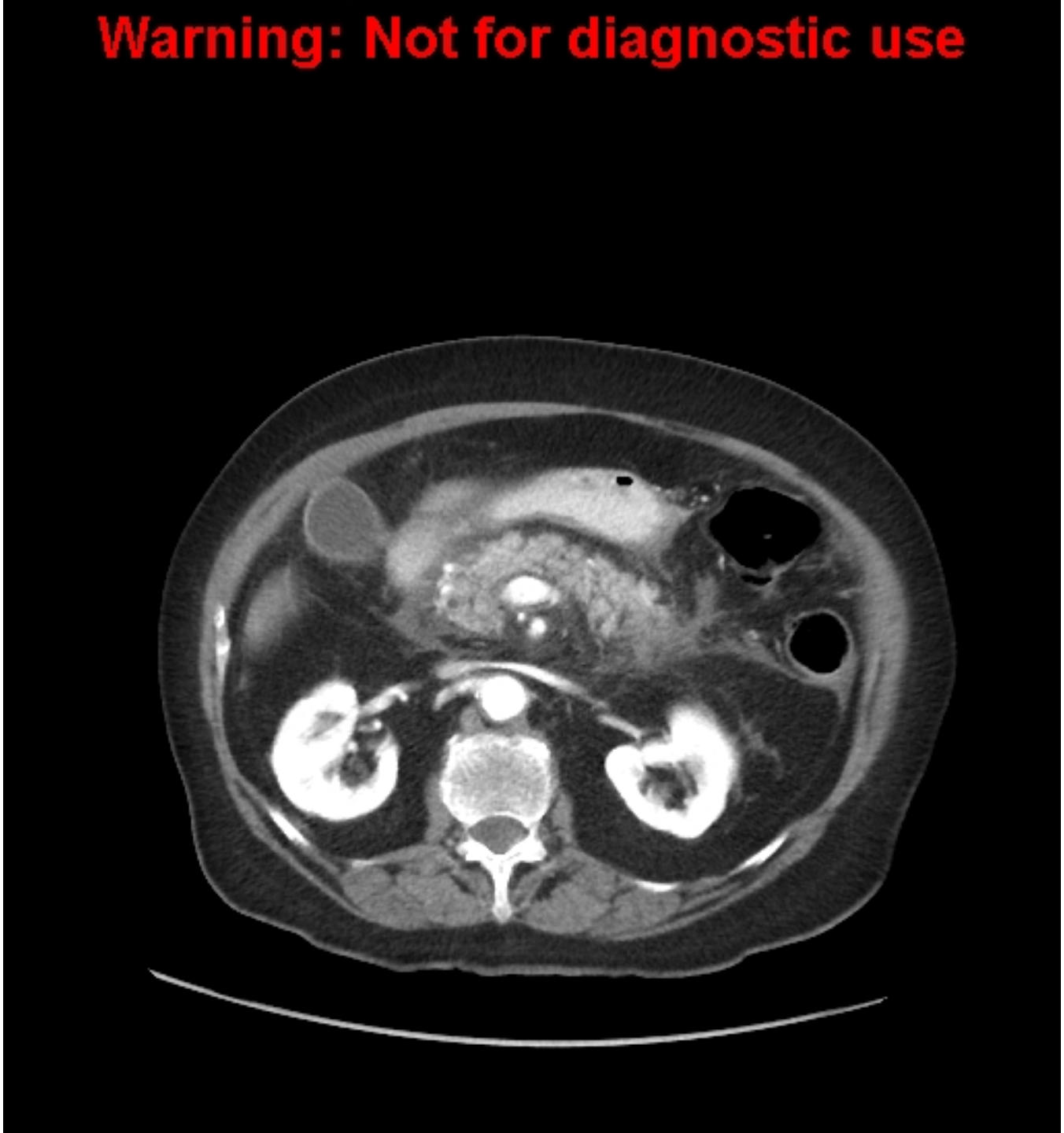

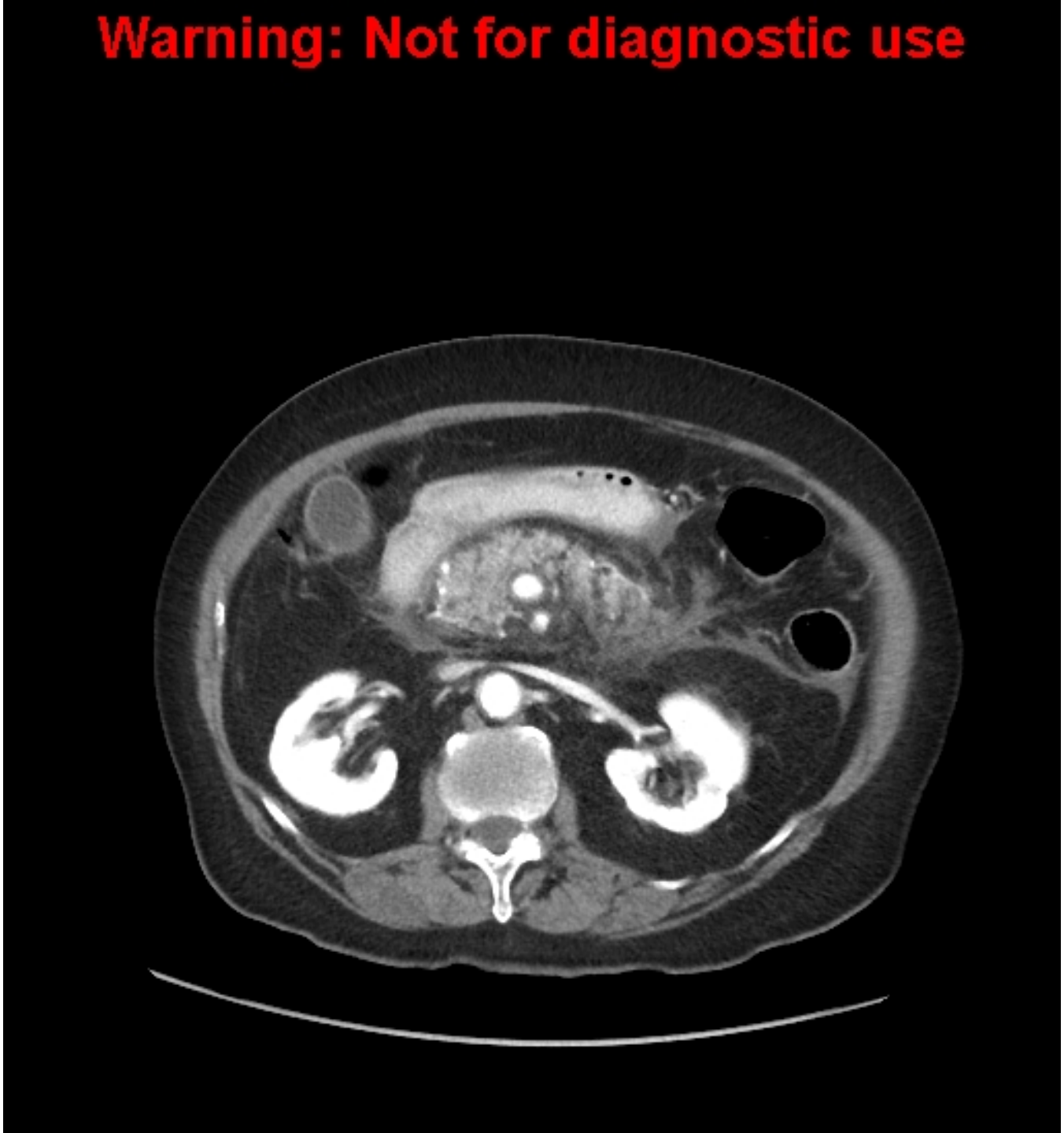

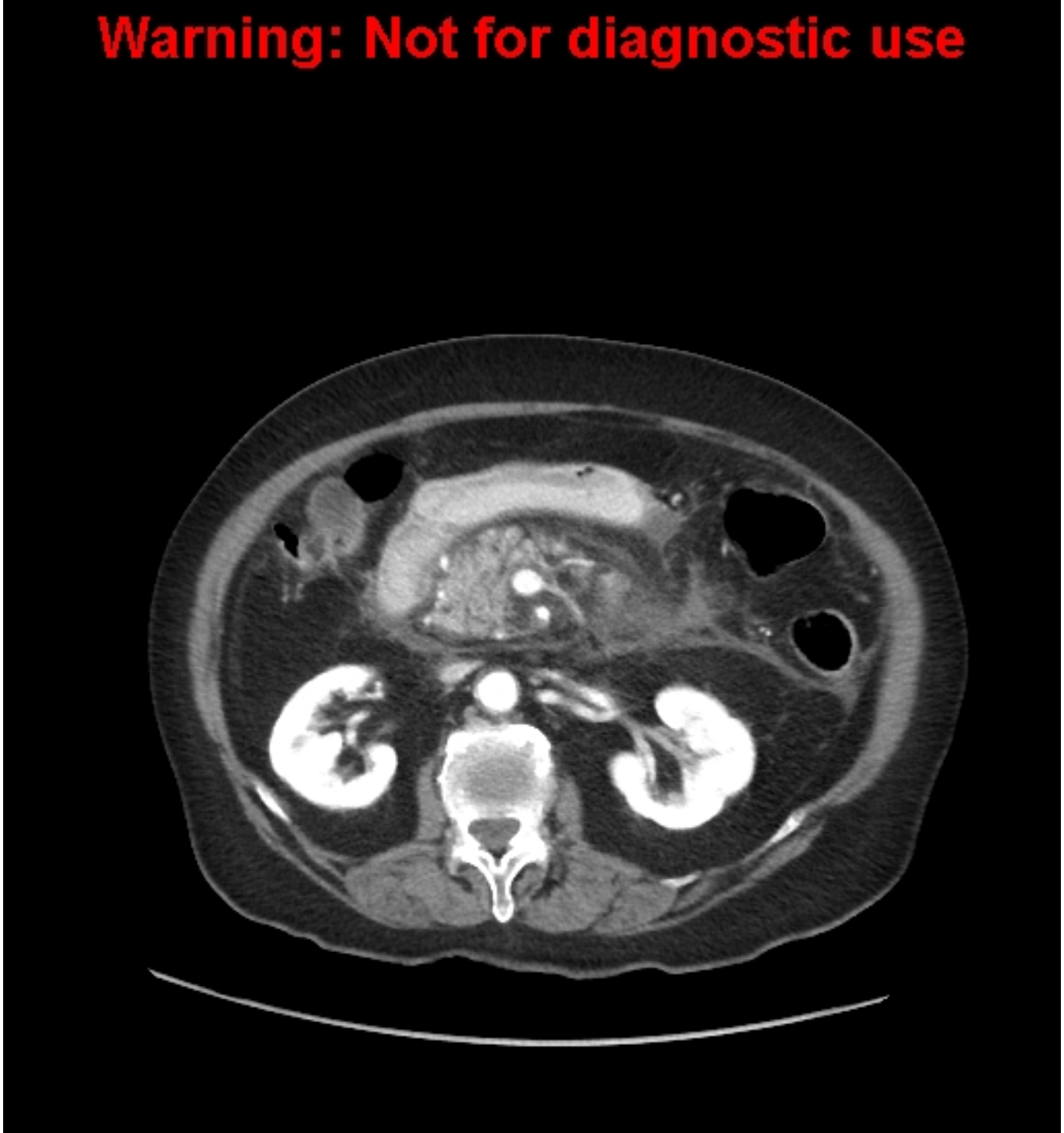
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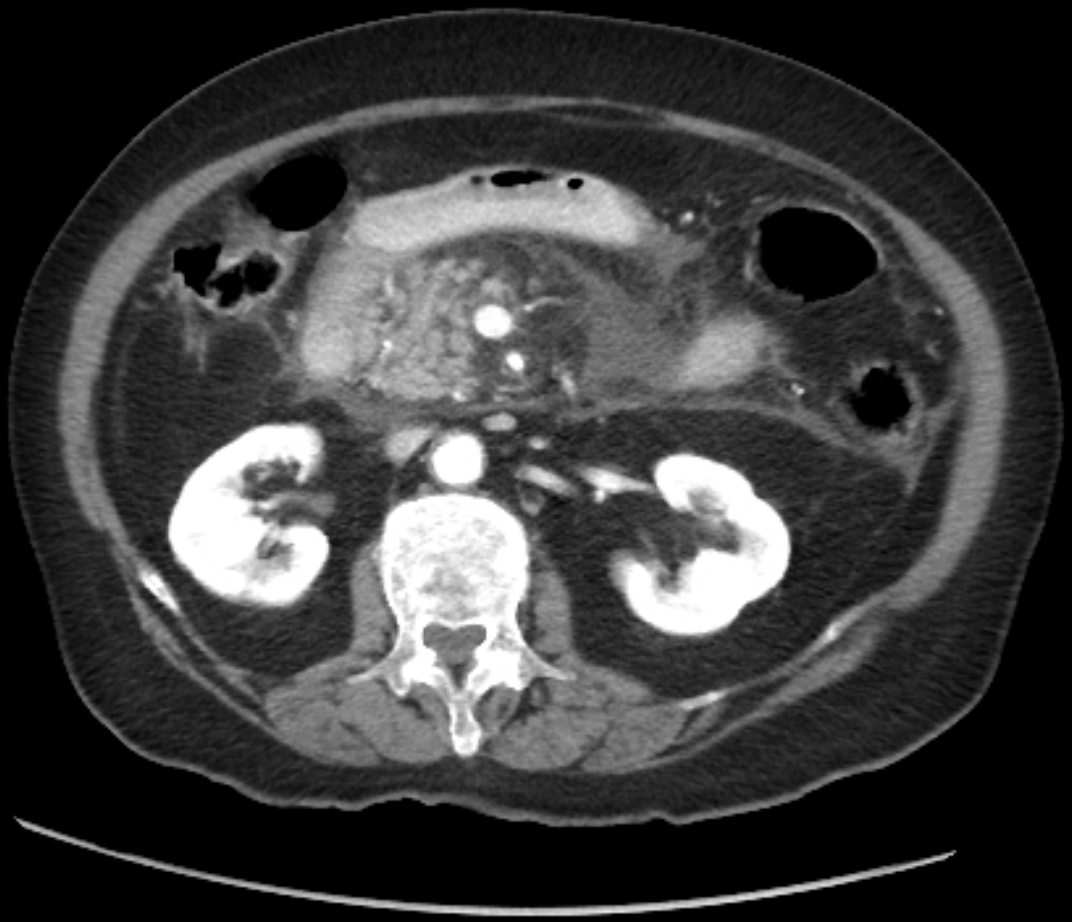
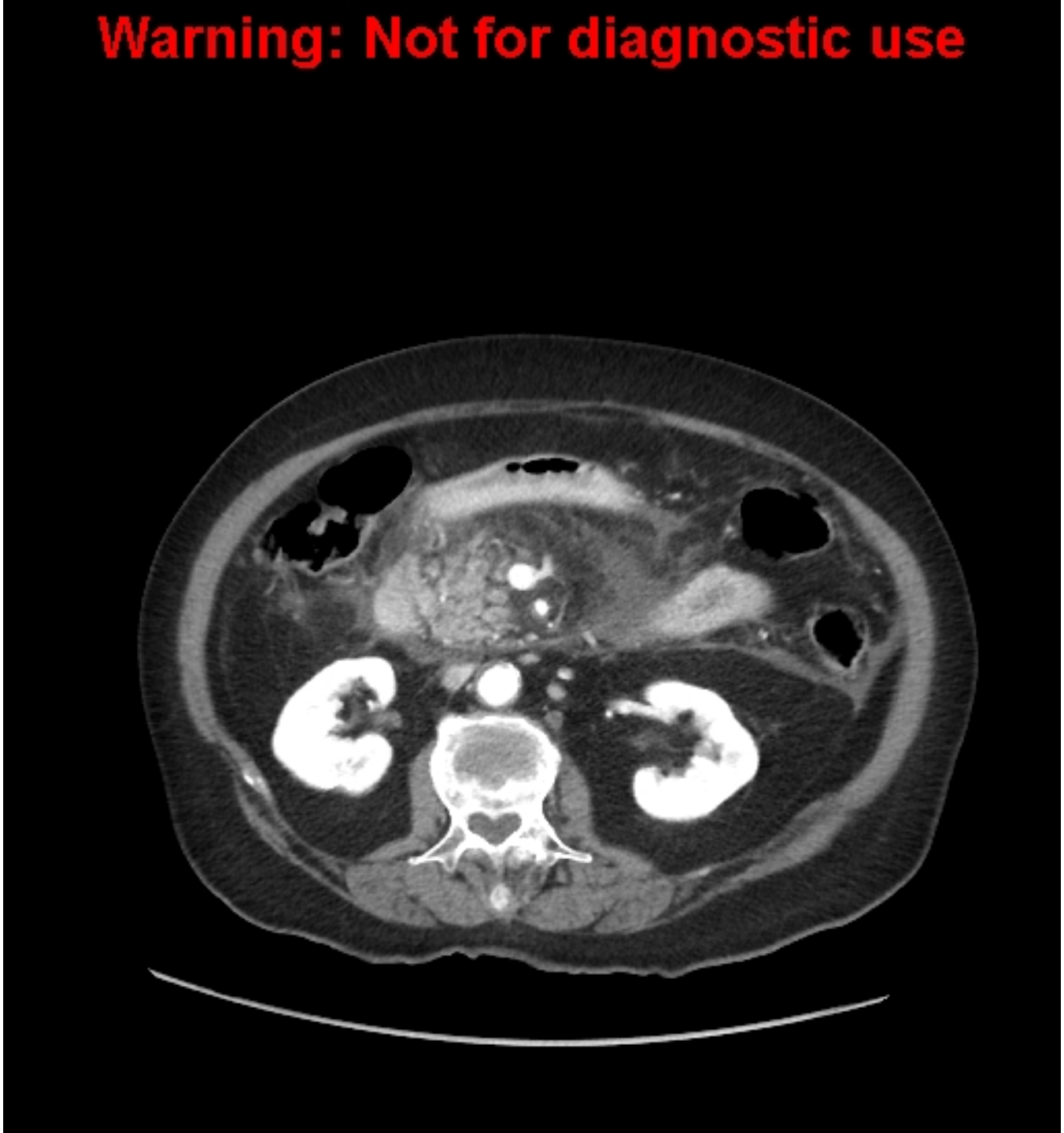
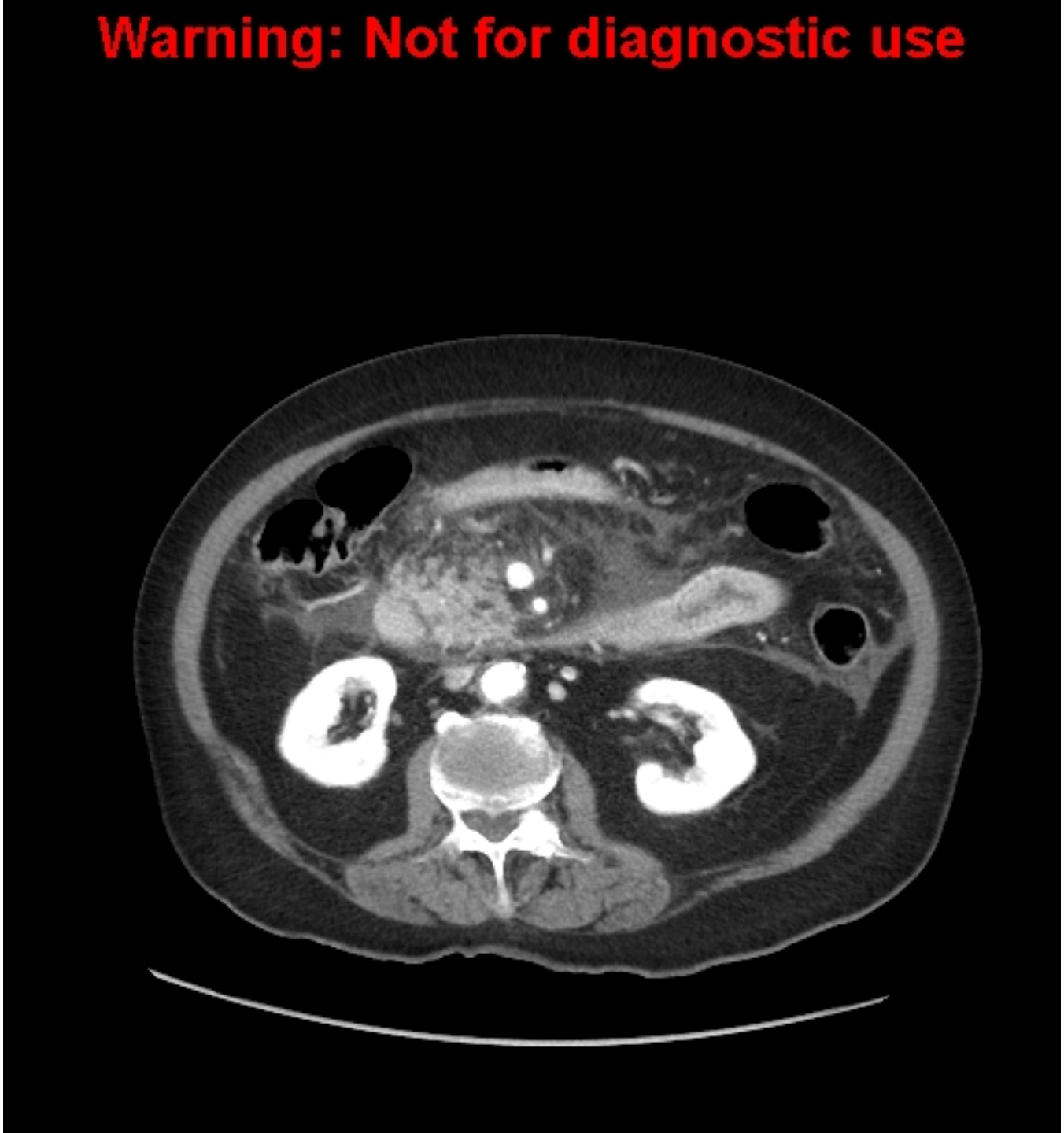
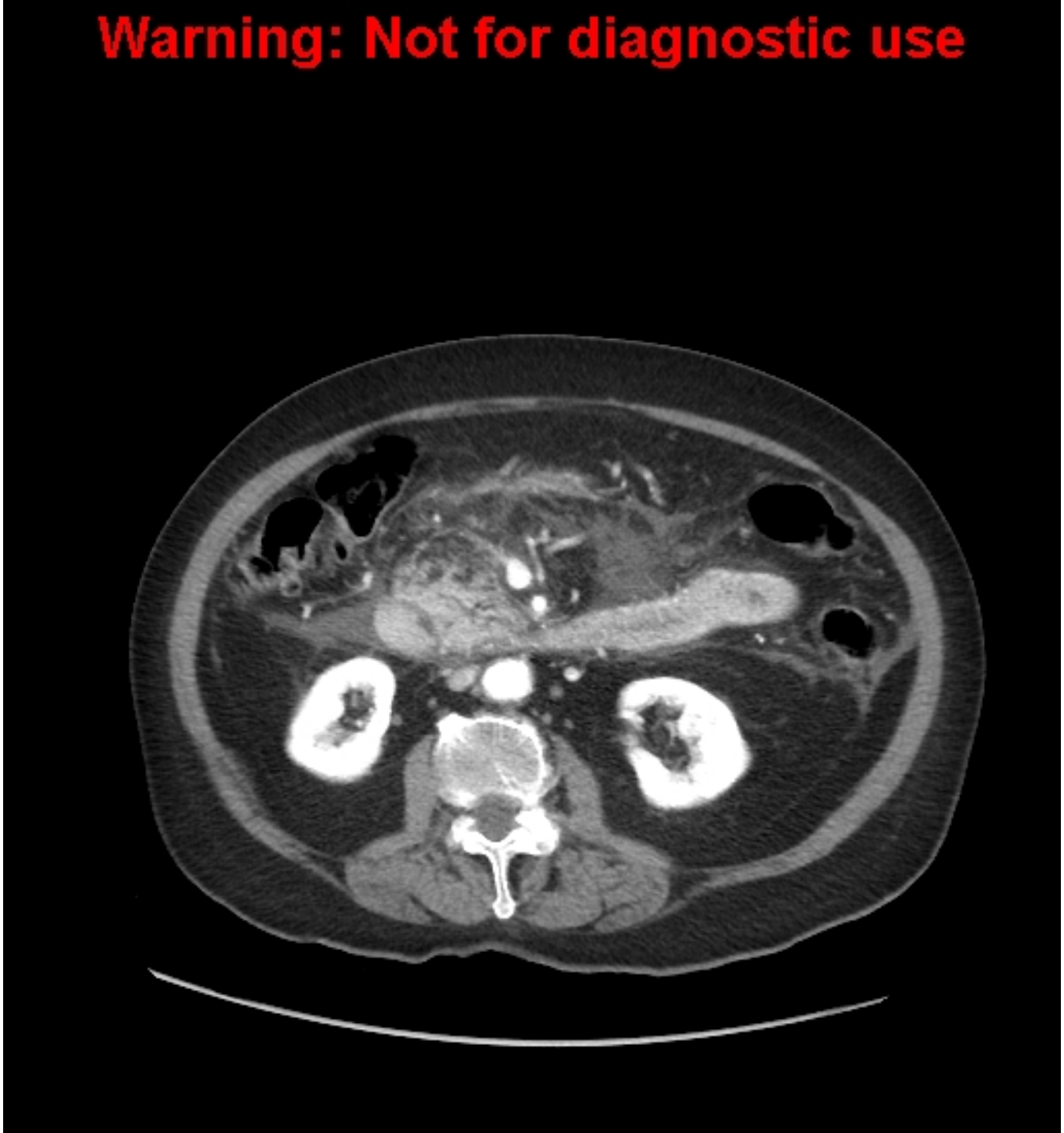


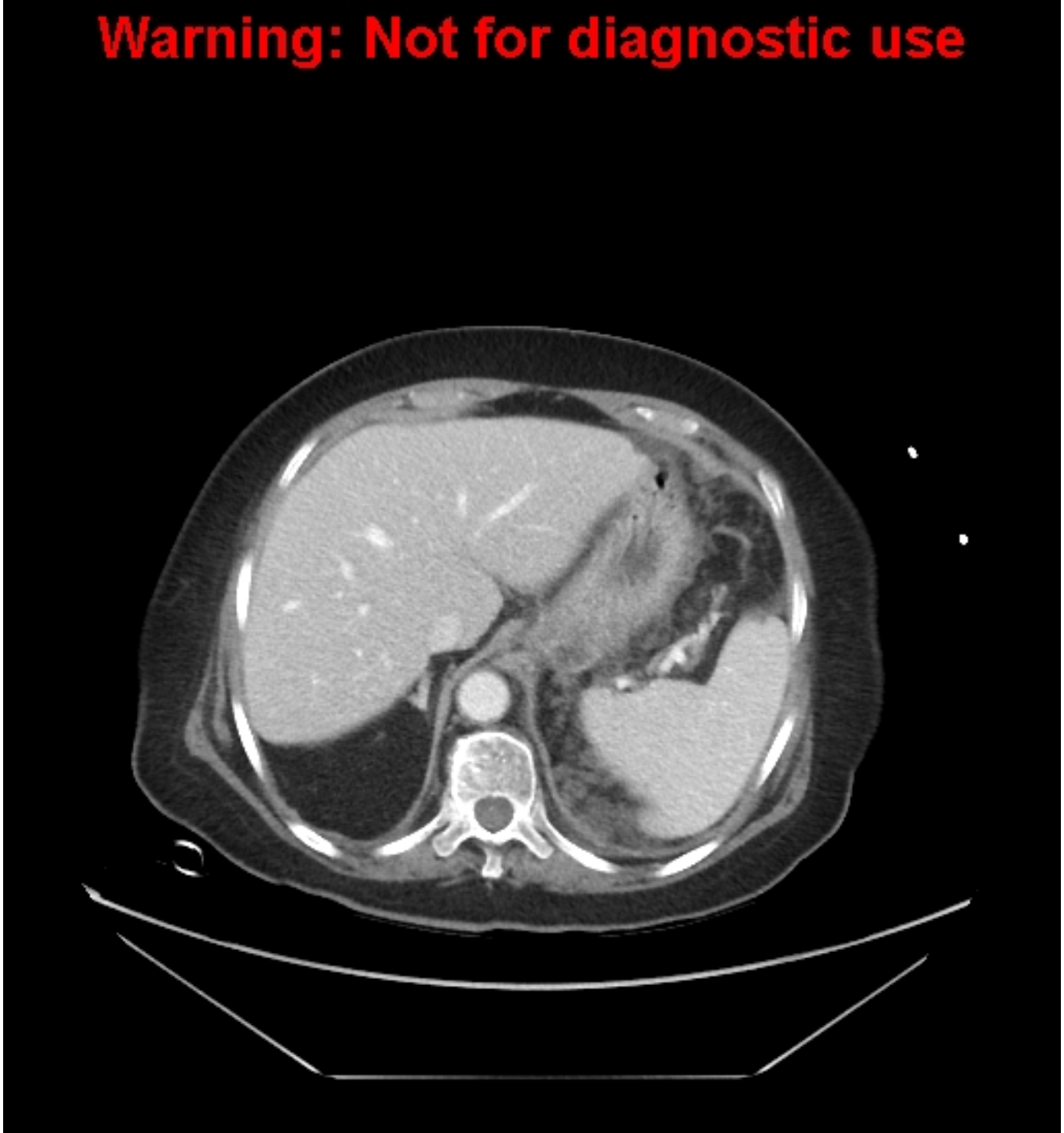






Hospital Course

- Admit/IVF
- Abdominal distension
  - Plain films unremarkable
  - Failed trial of PO and NG feeds
  - TPN started
- Required intubation for respiratory failure
- IV ABX for MSSA
- Extubated but remained on high flow oxygen
- Transferred to the ICU for clinical deterioration
  - Respiratory failure, fevers, tachycardia, WBC 16.3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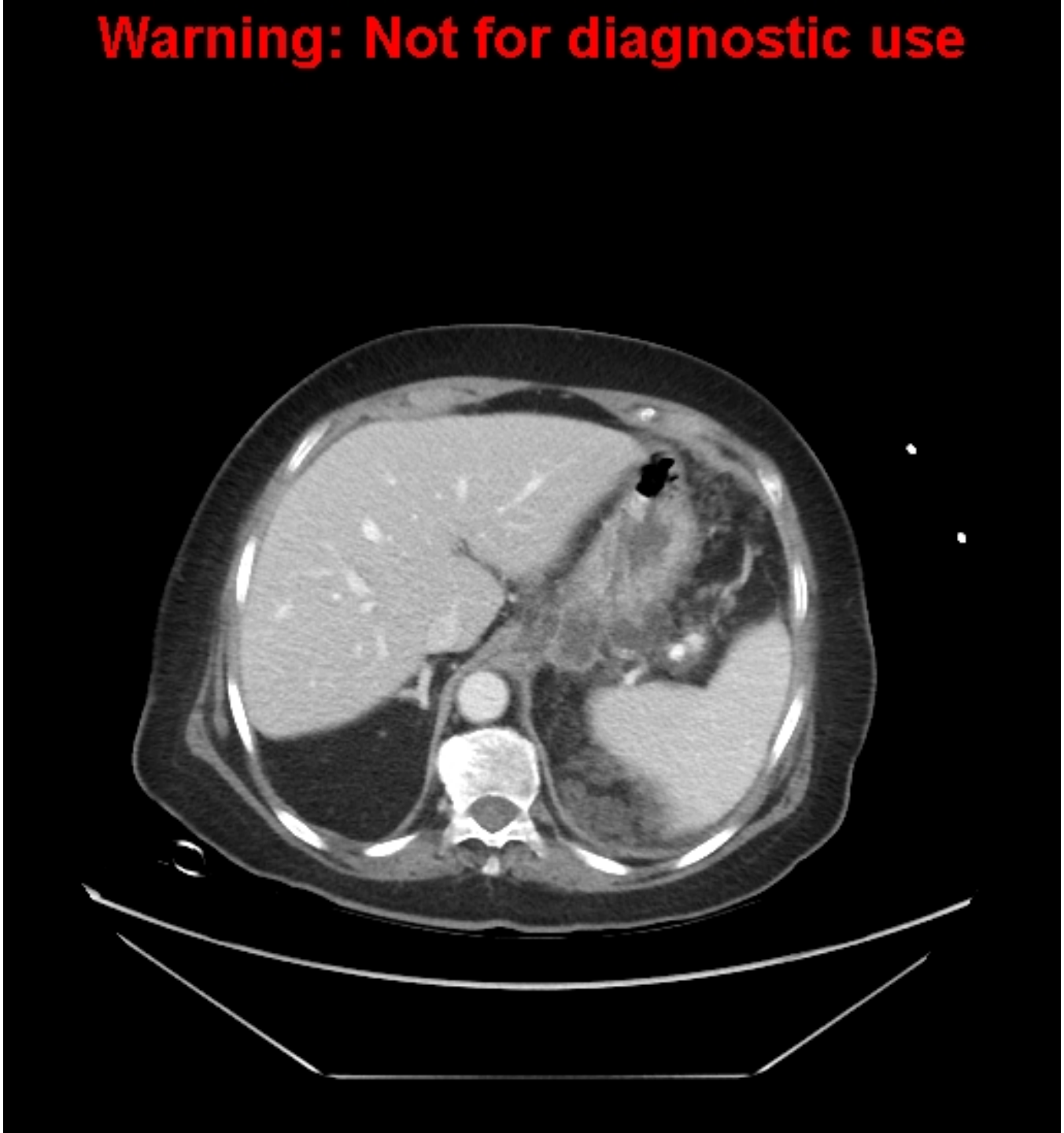
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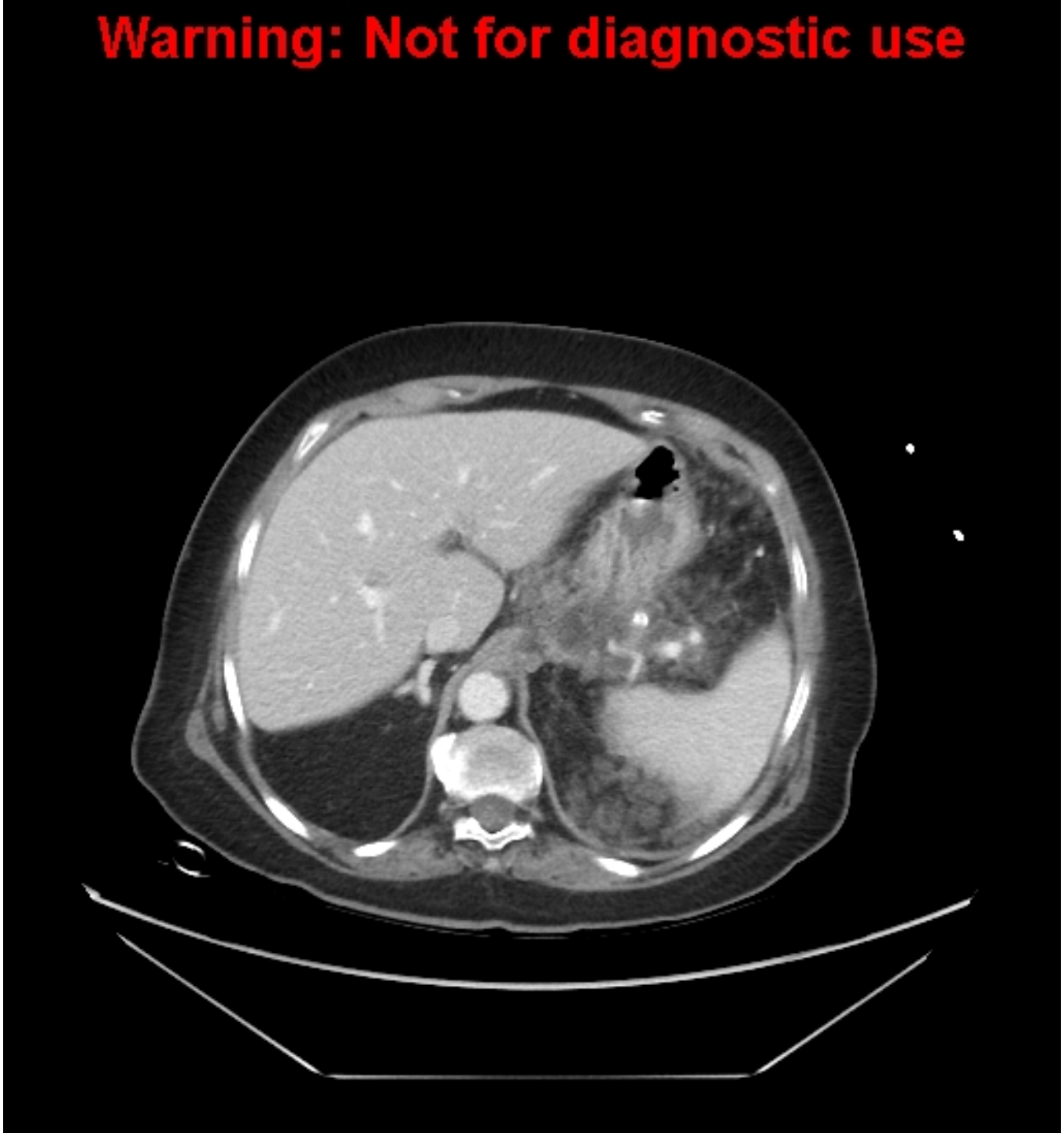
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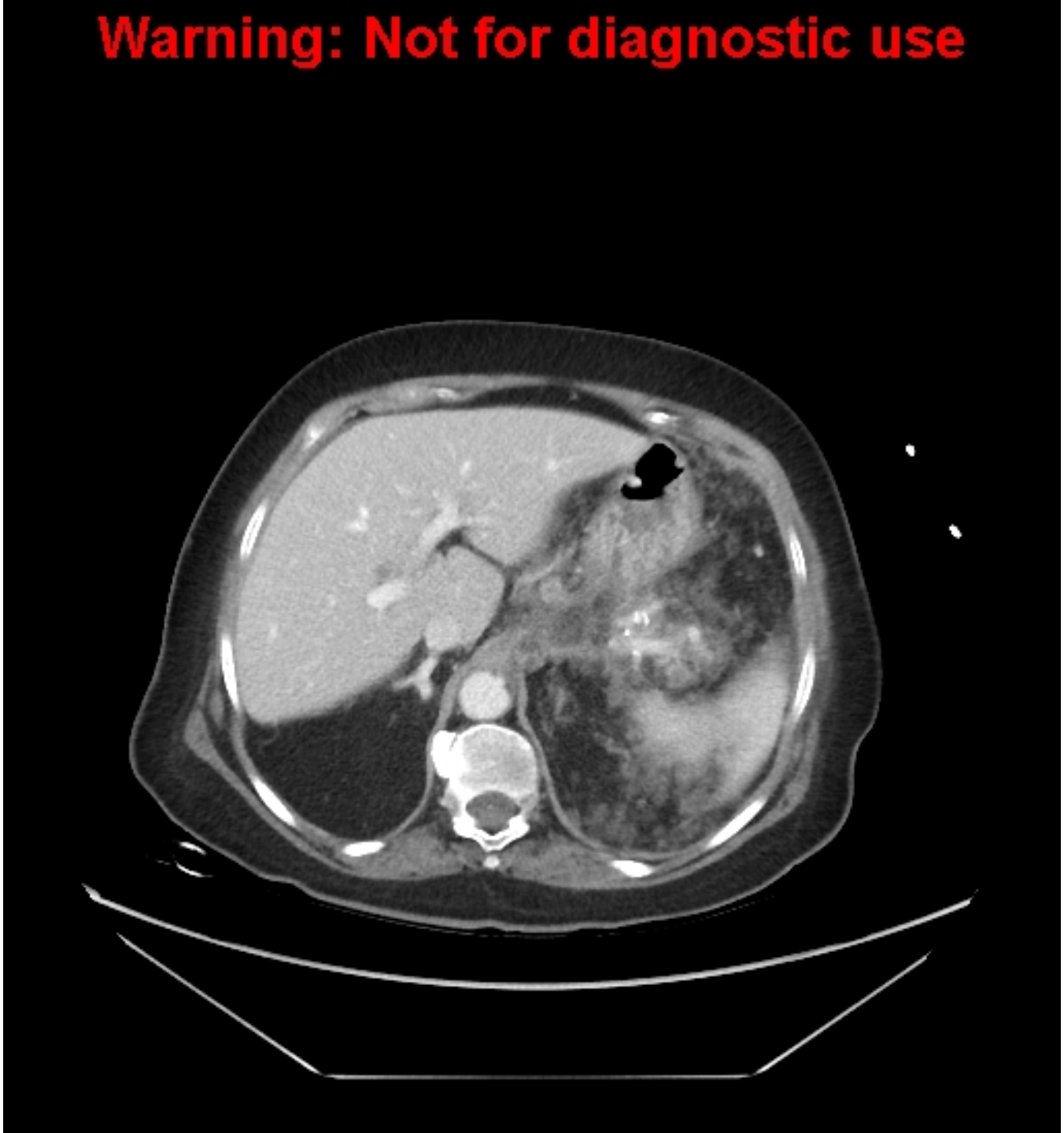
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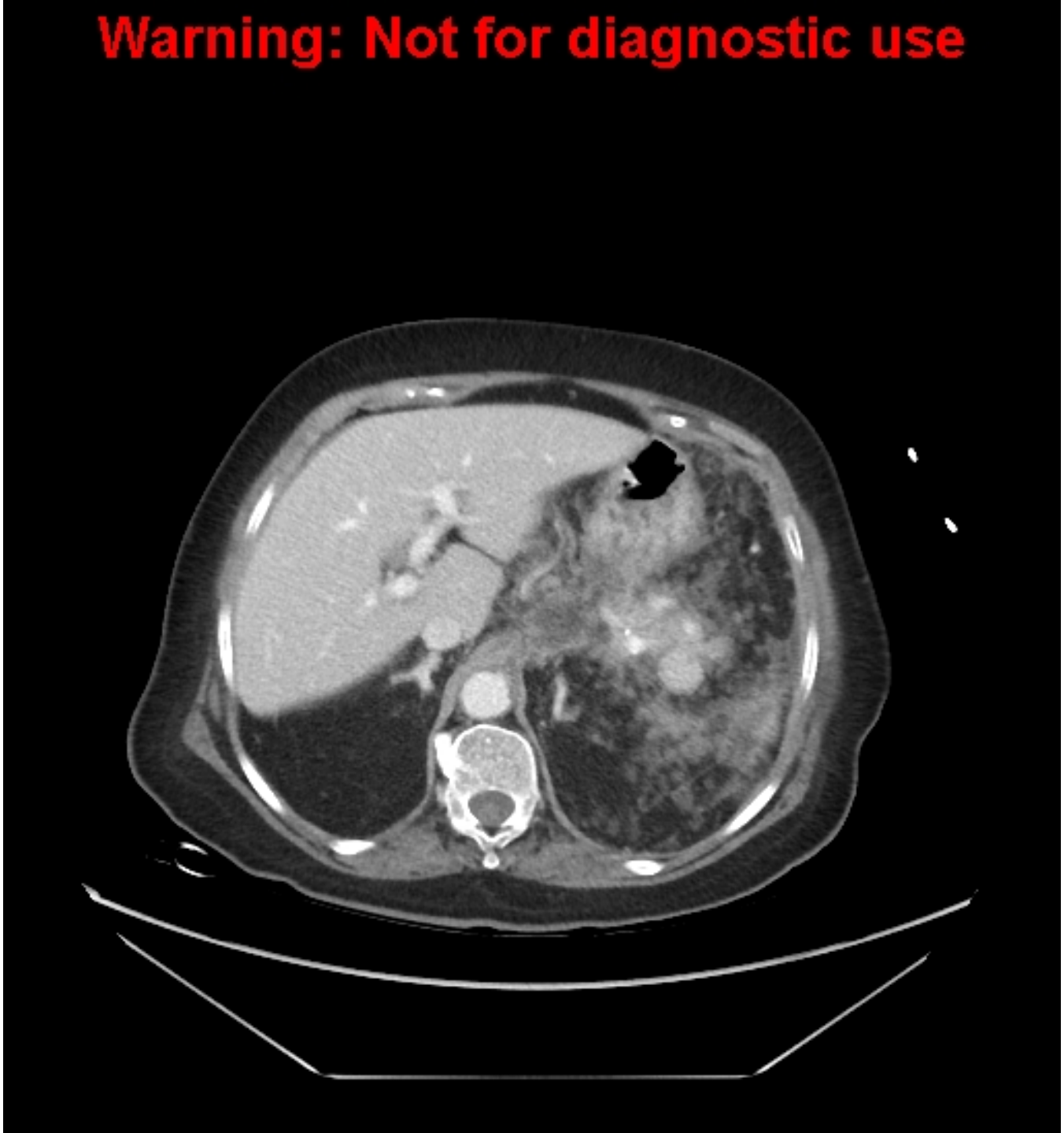
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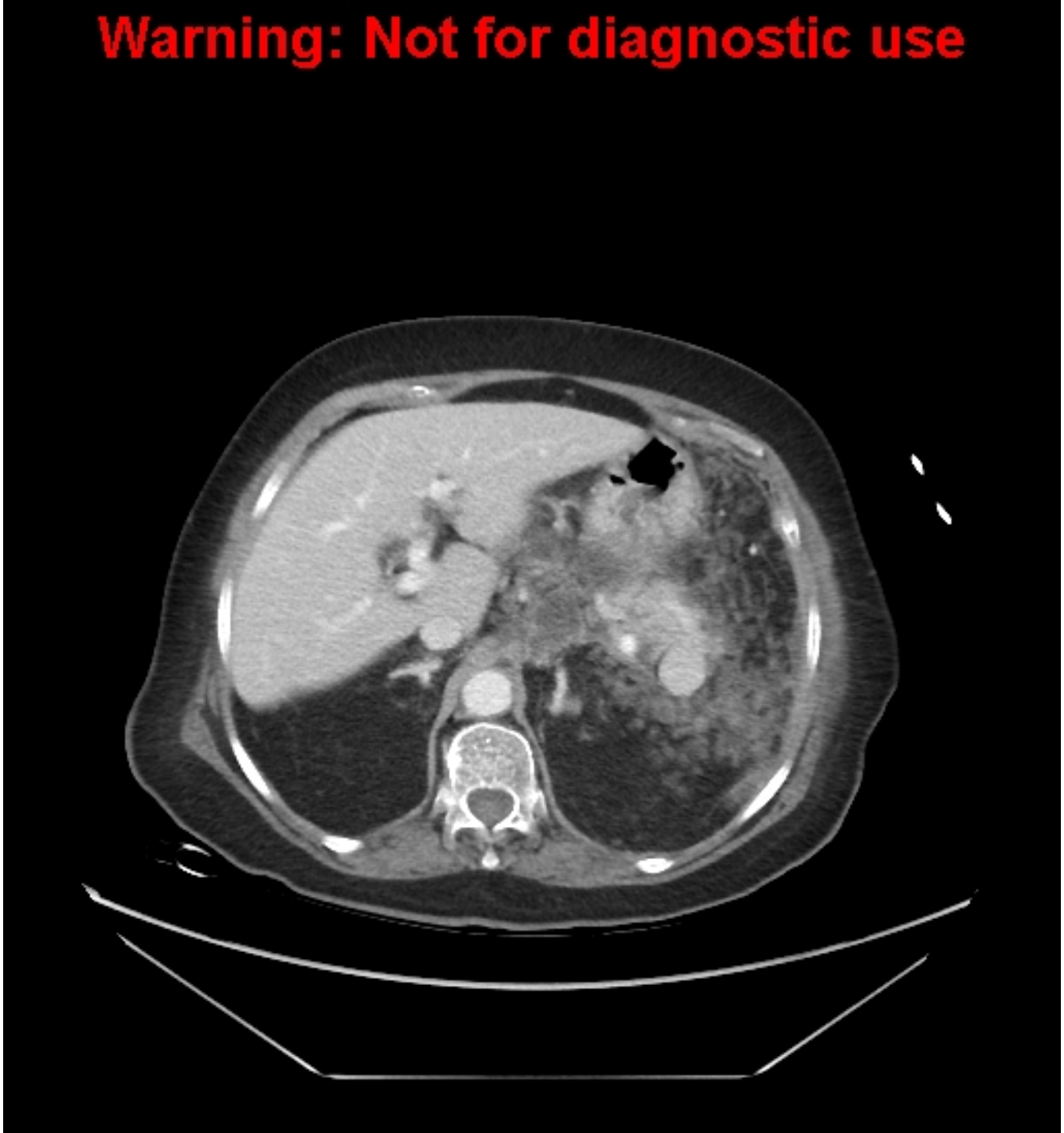
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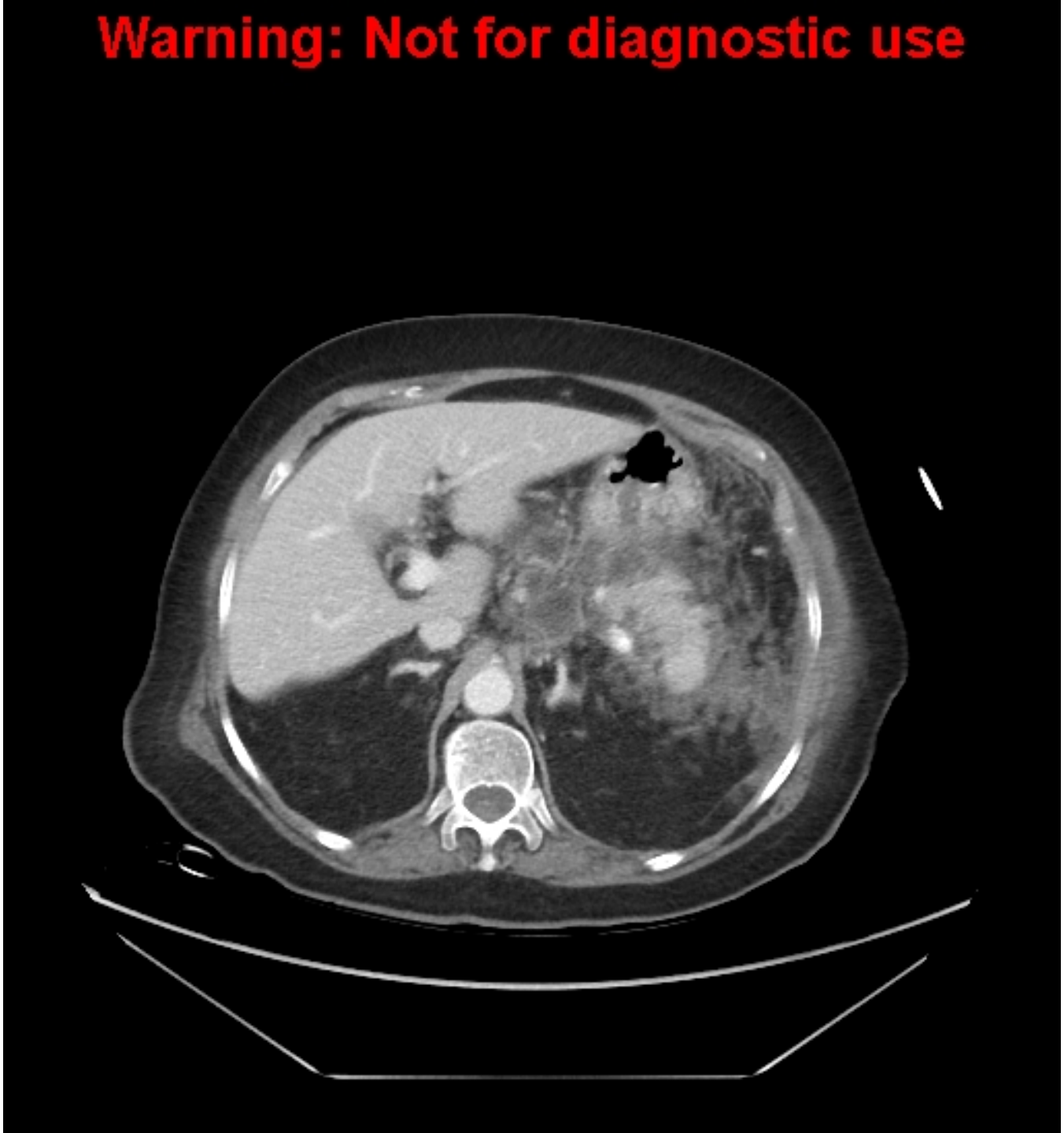
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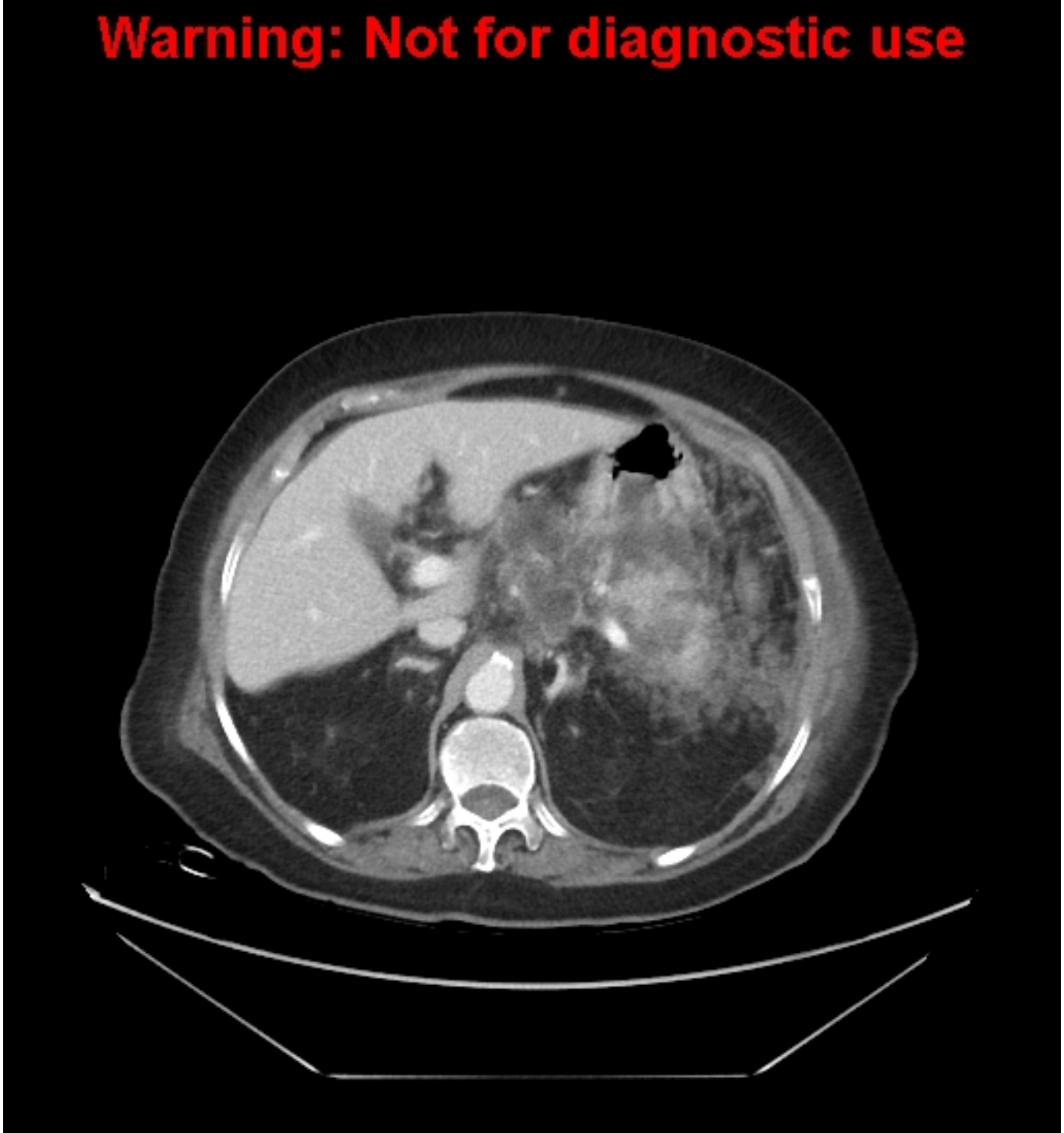
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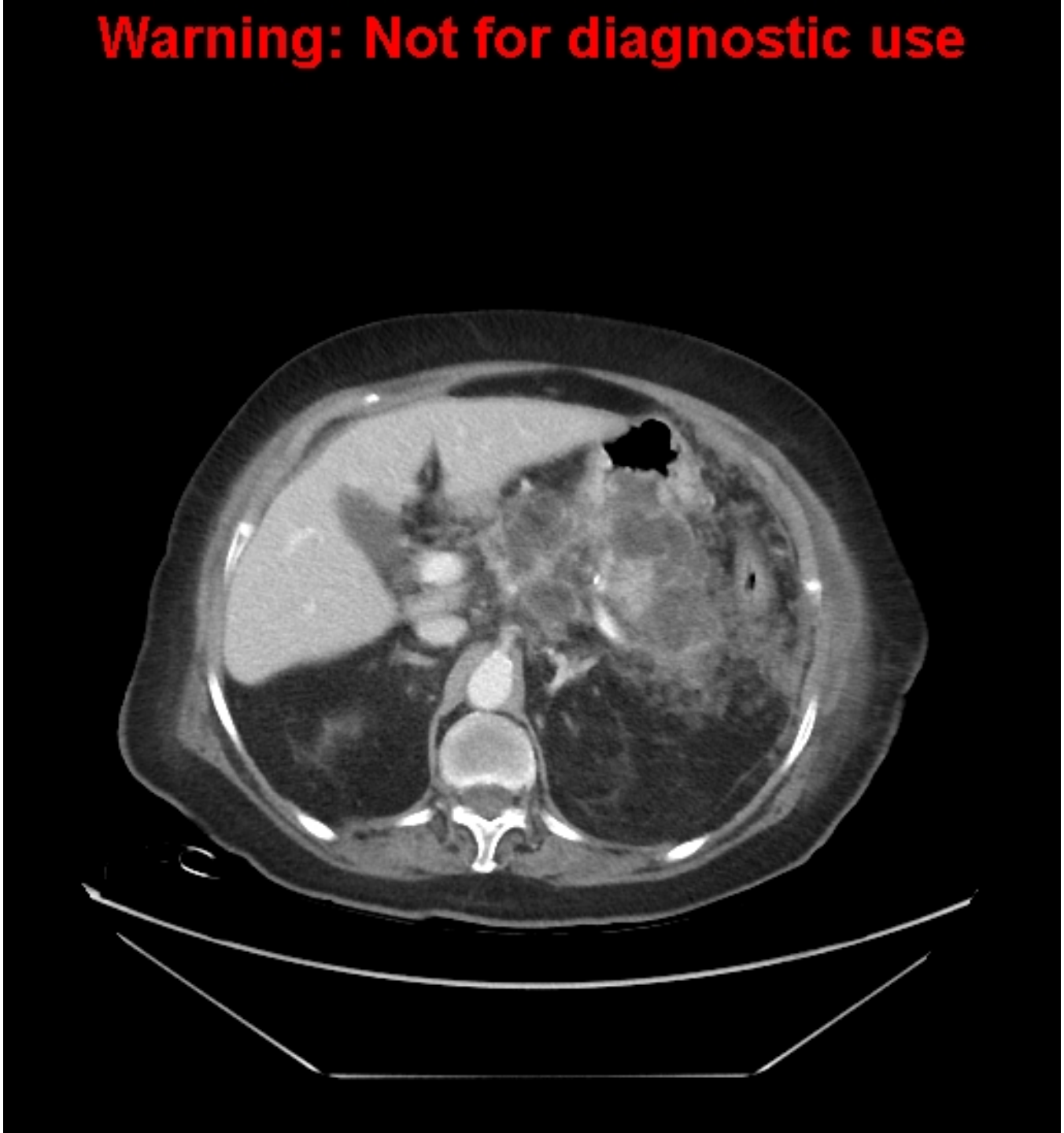
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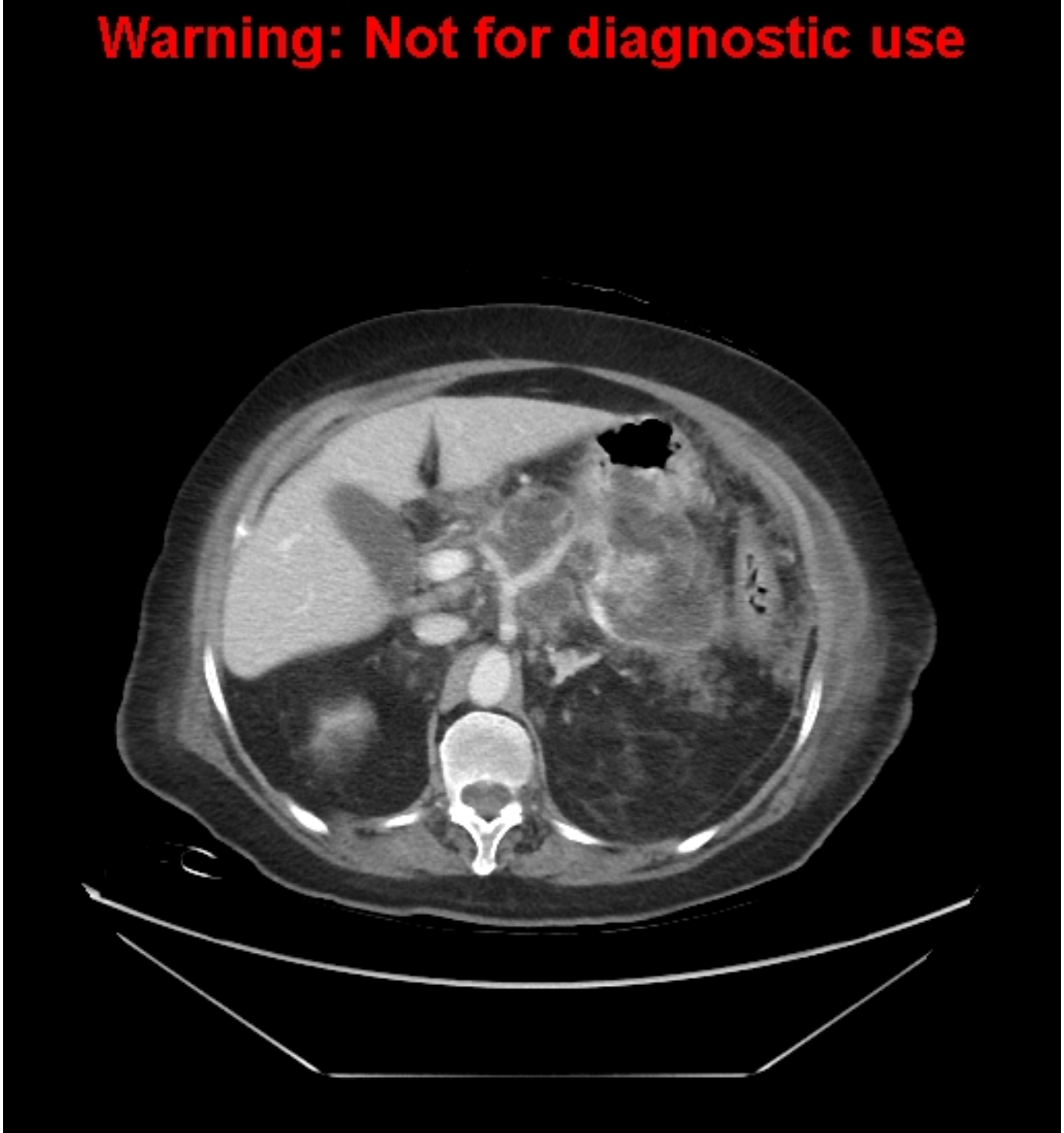
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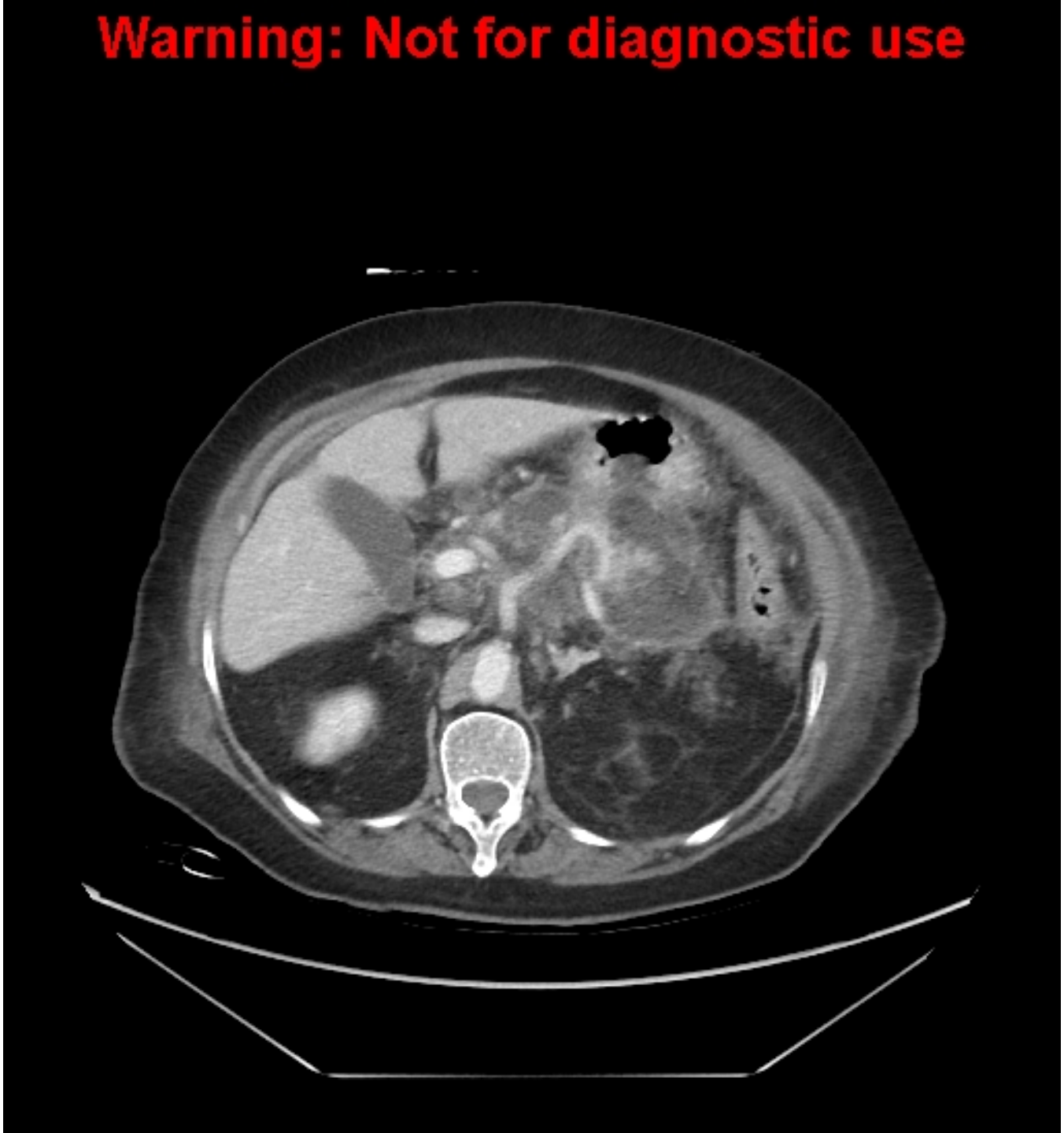
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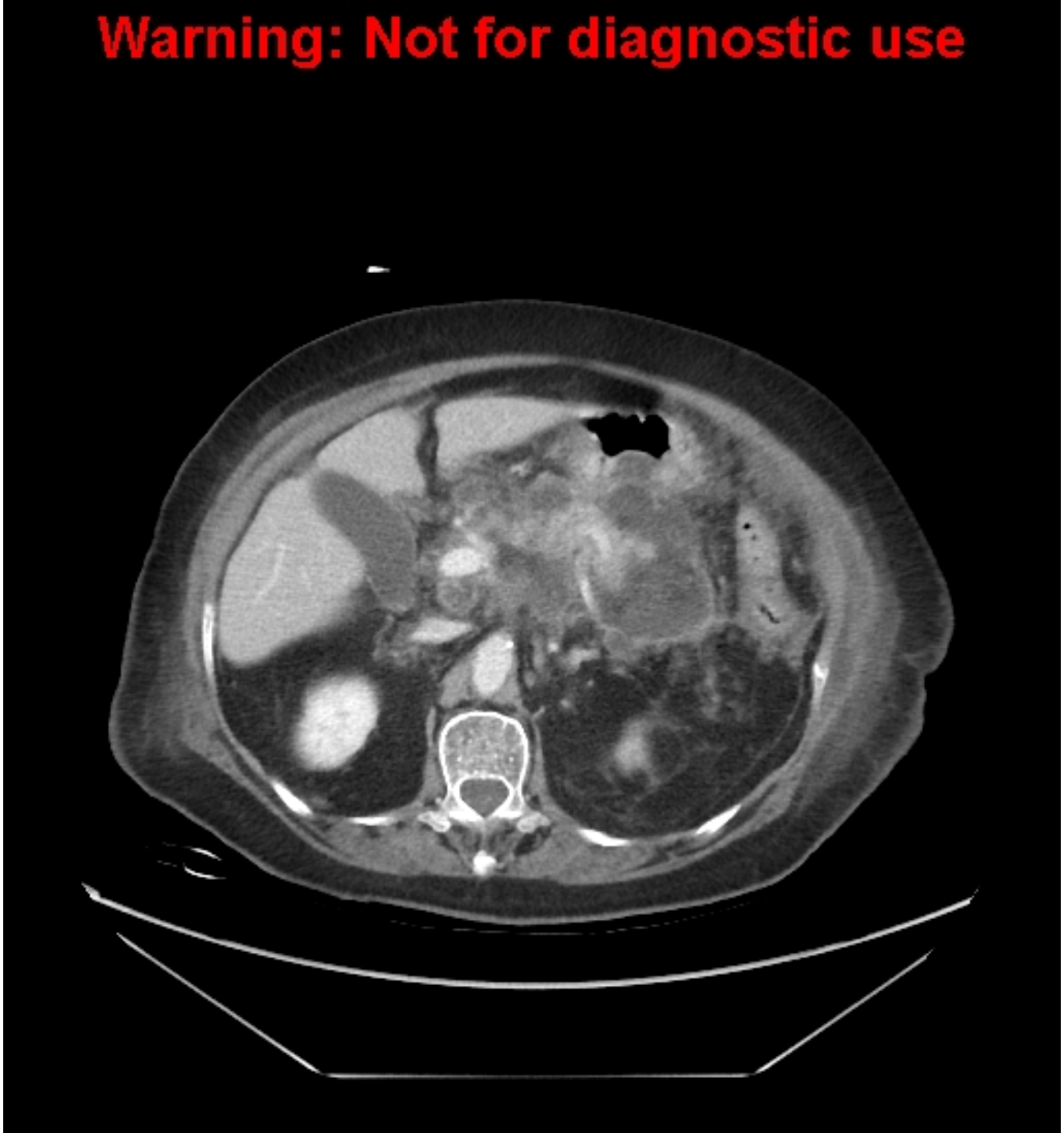
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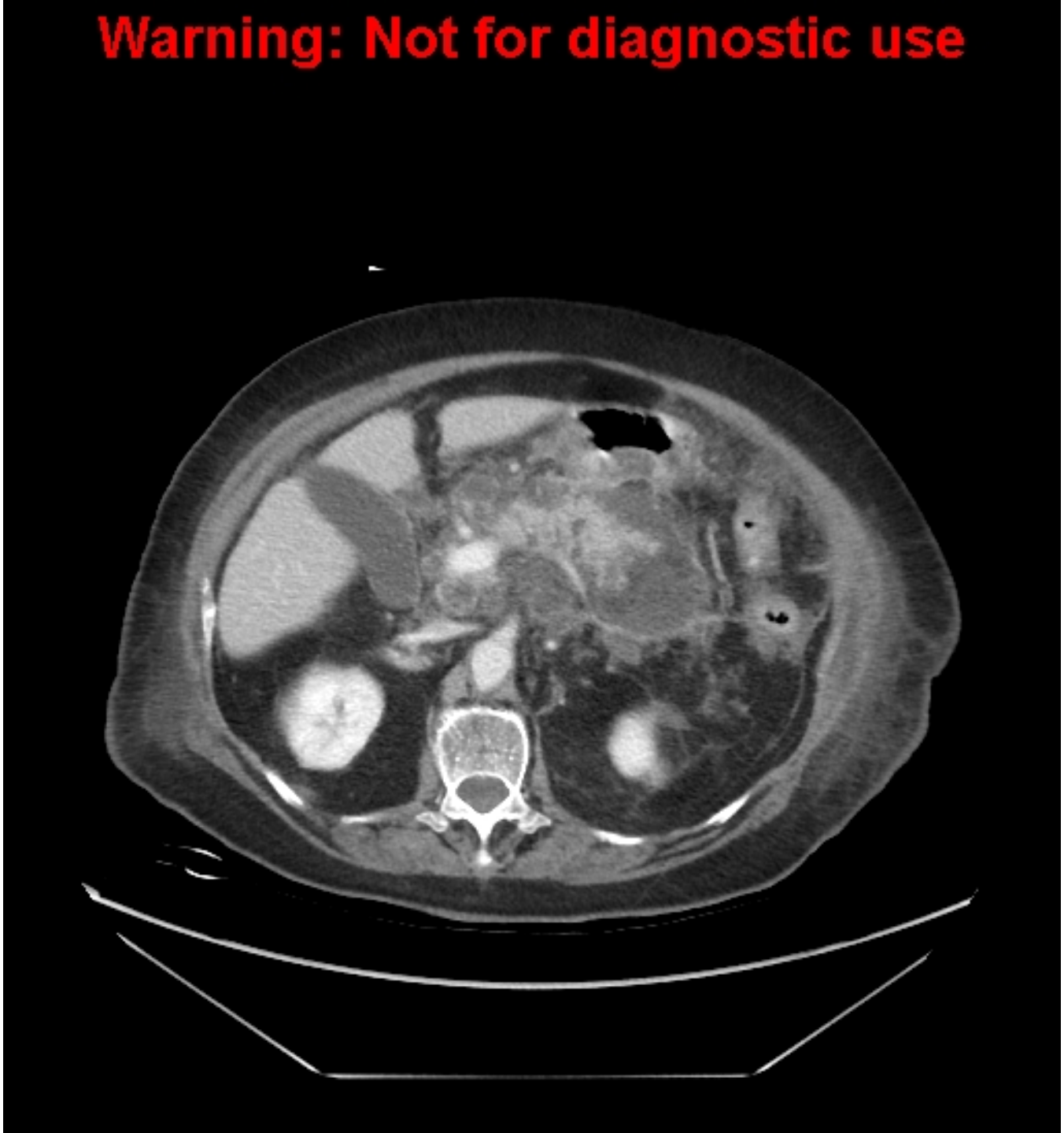
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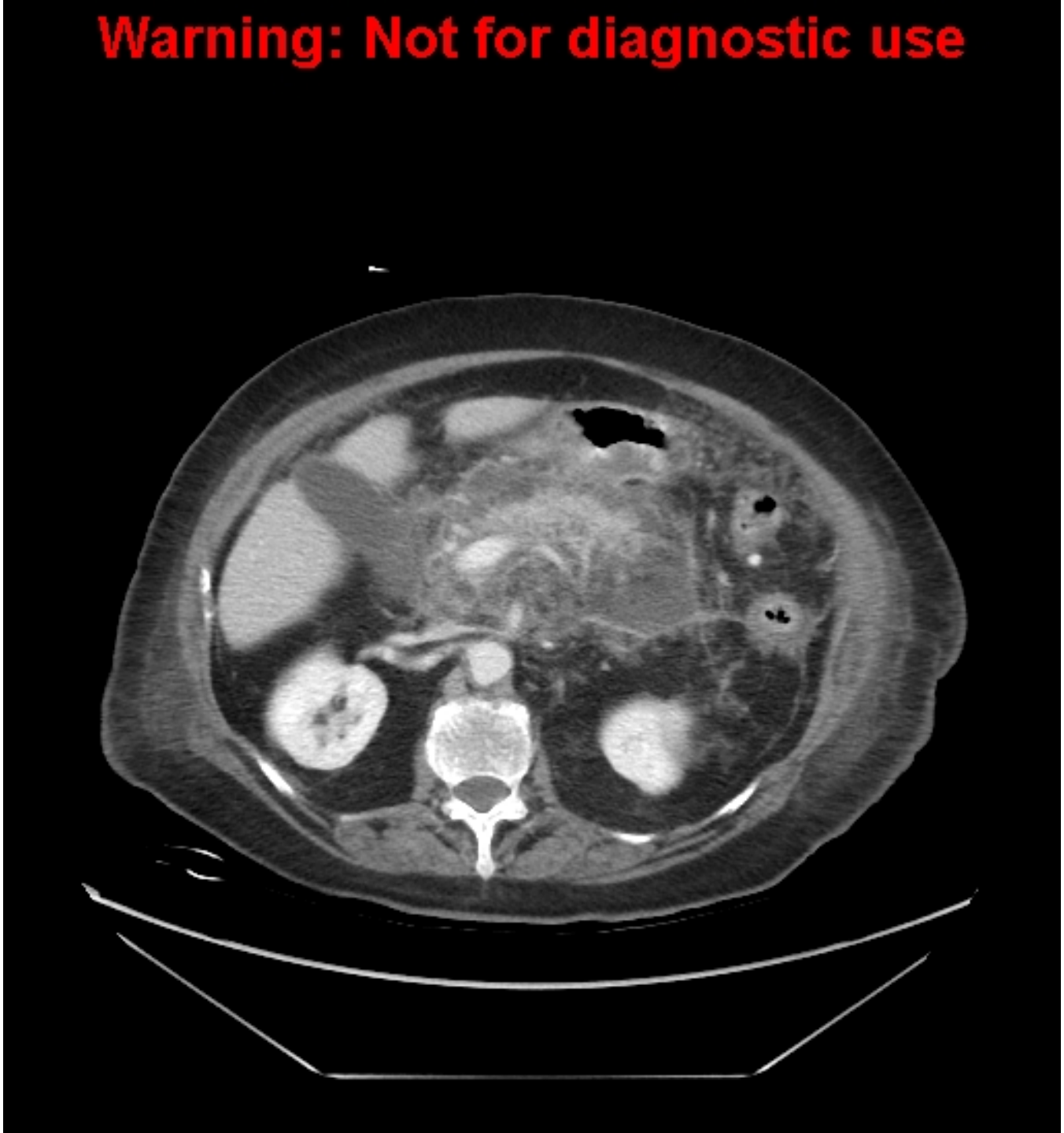
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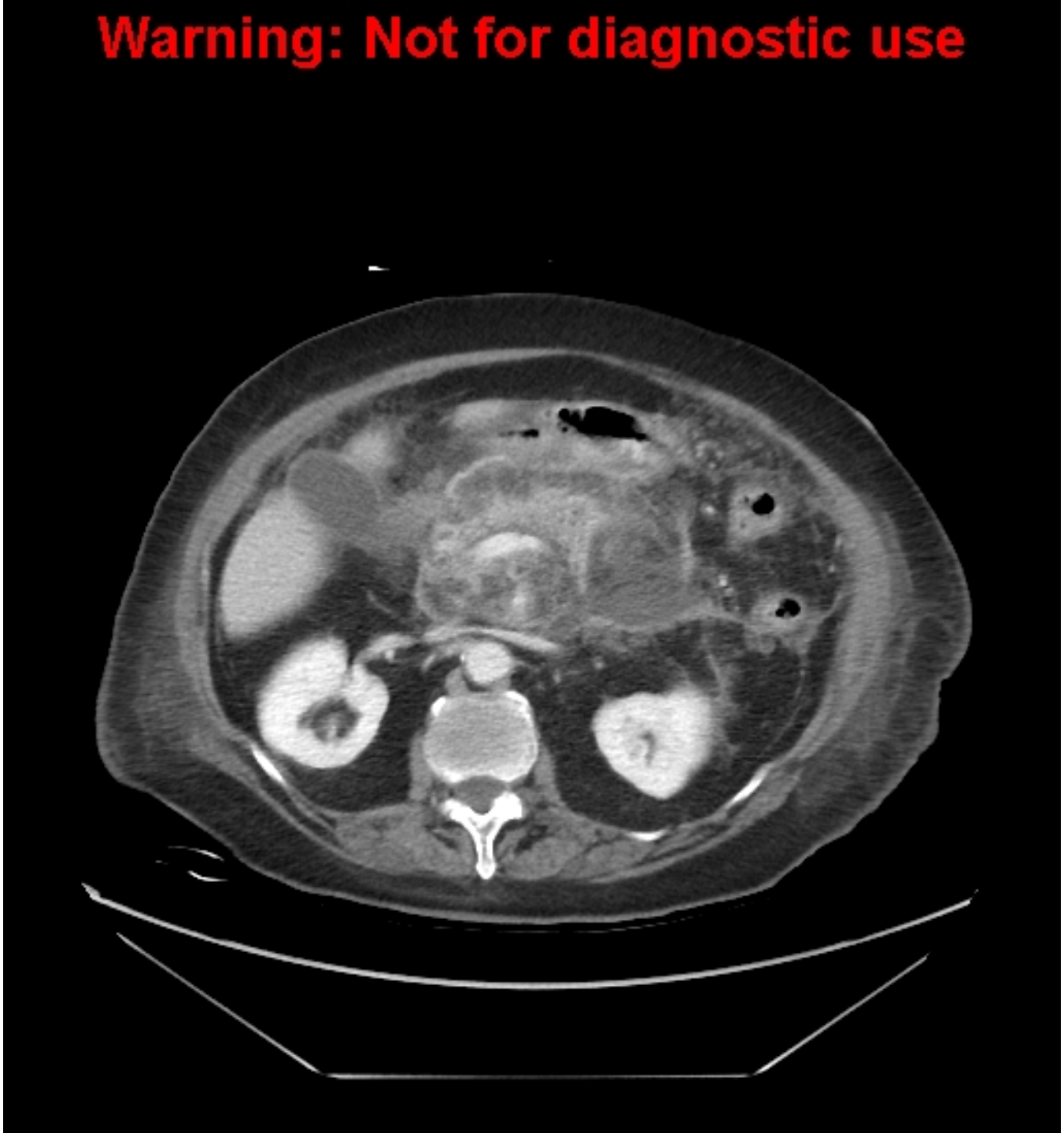
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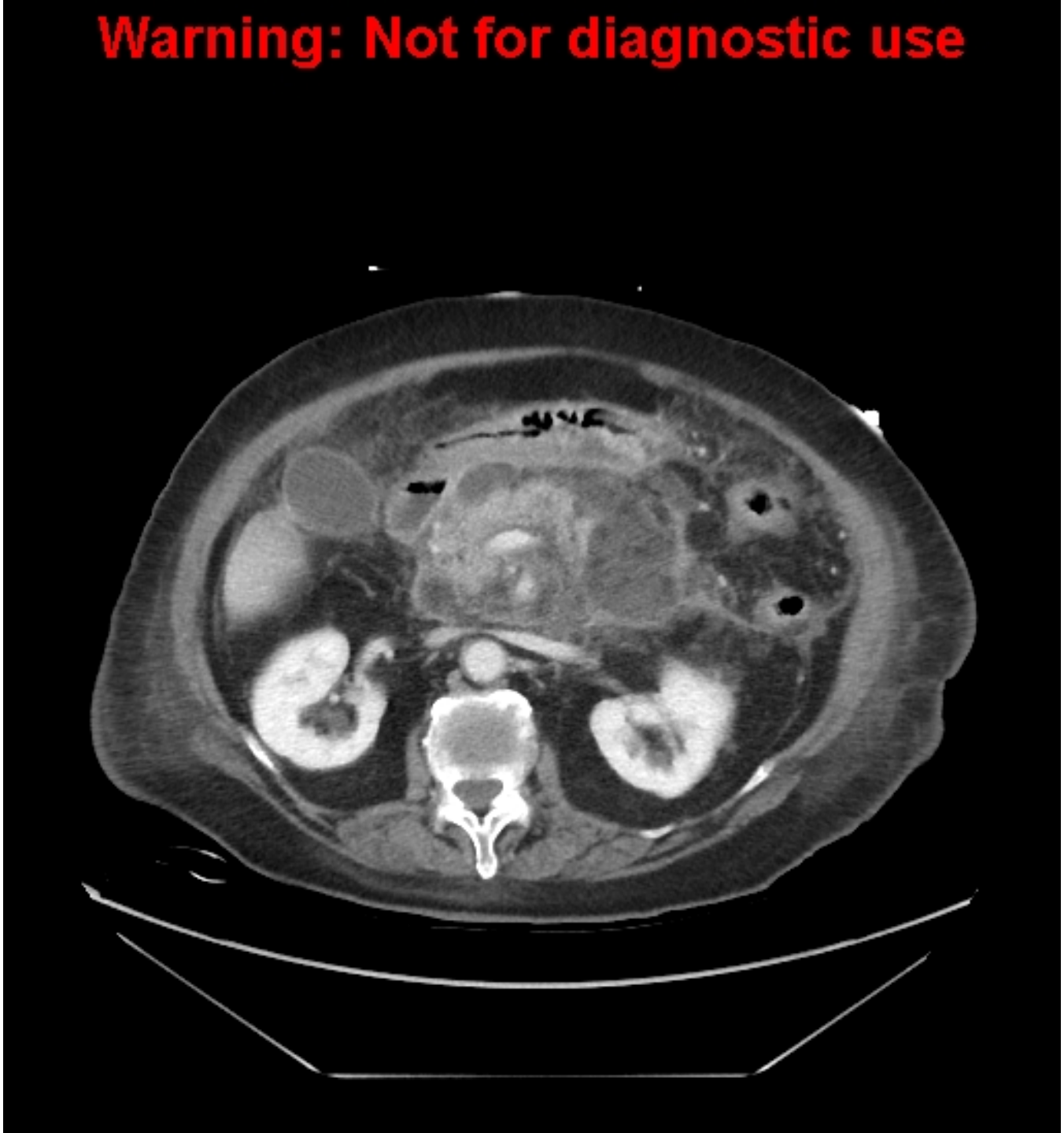
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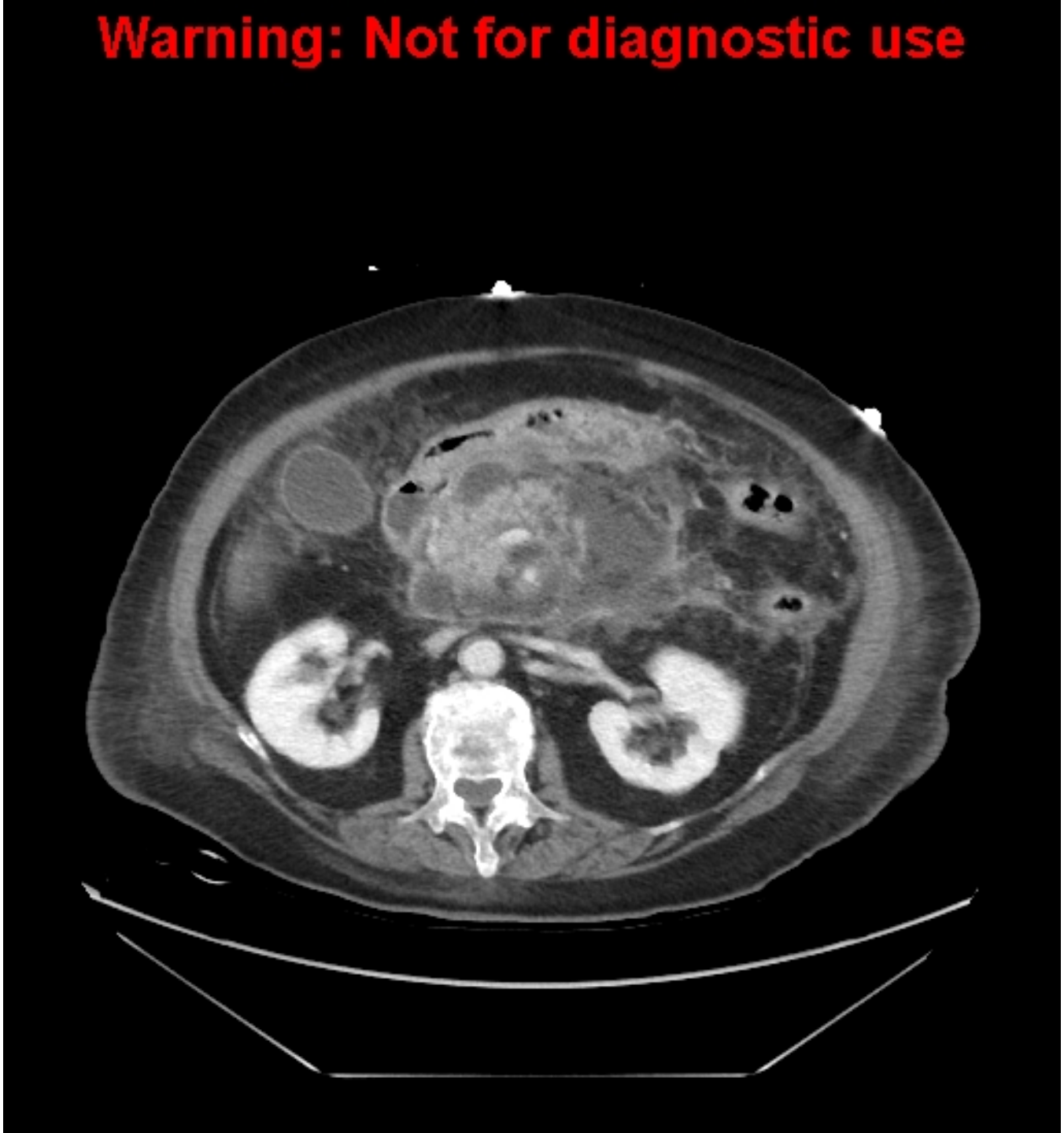
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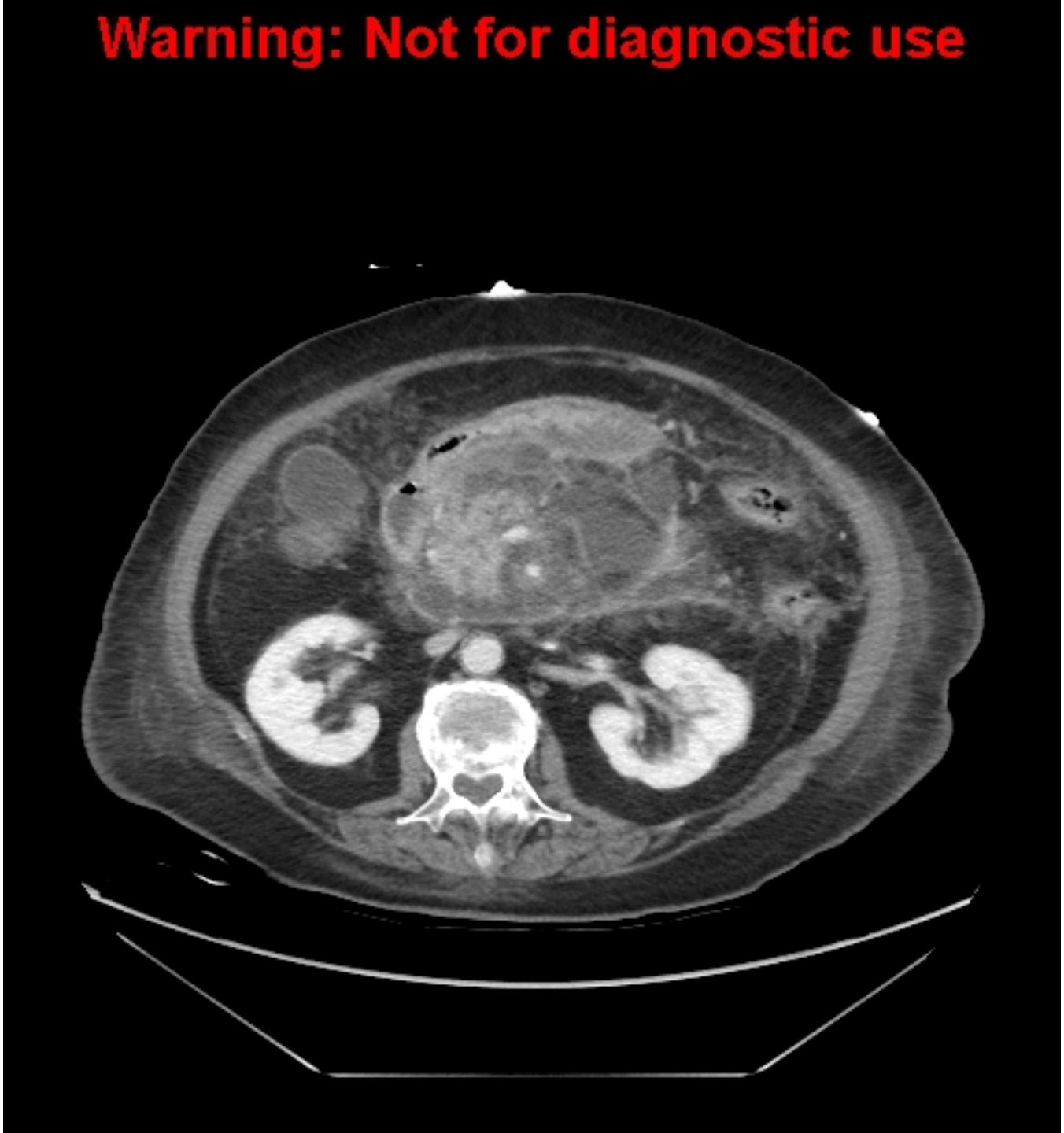
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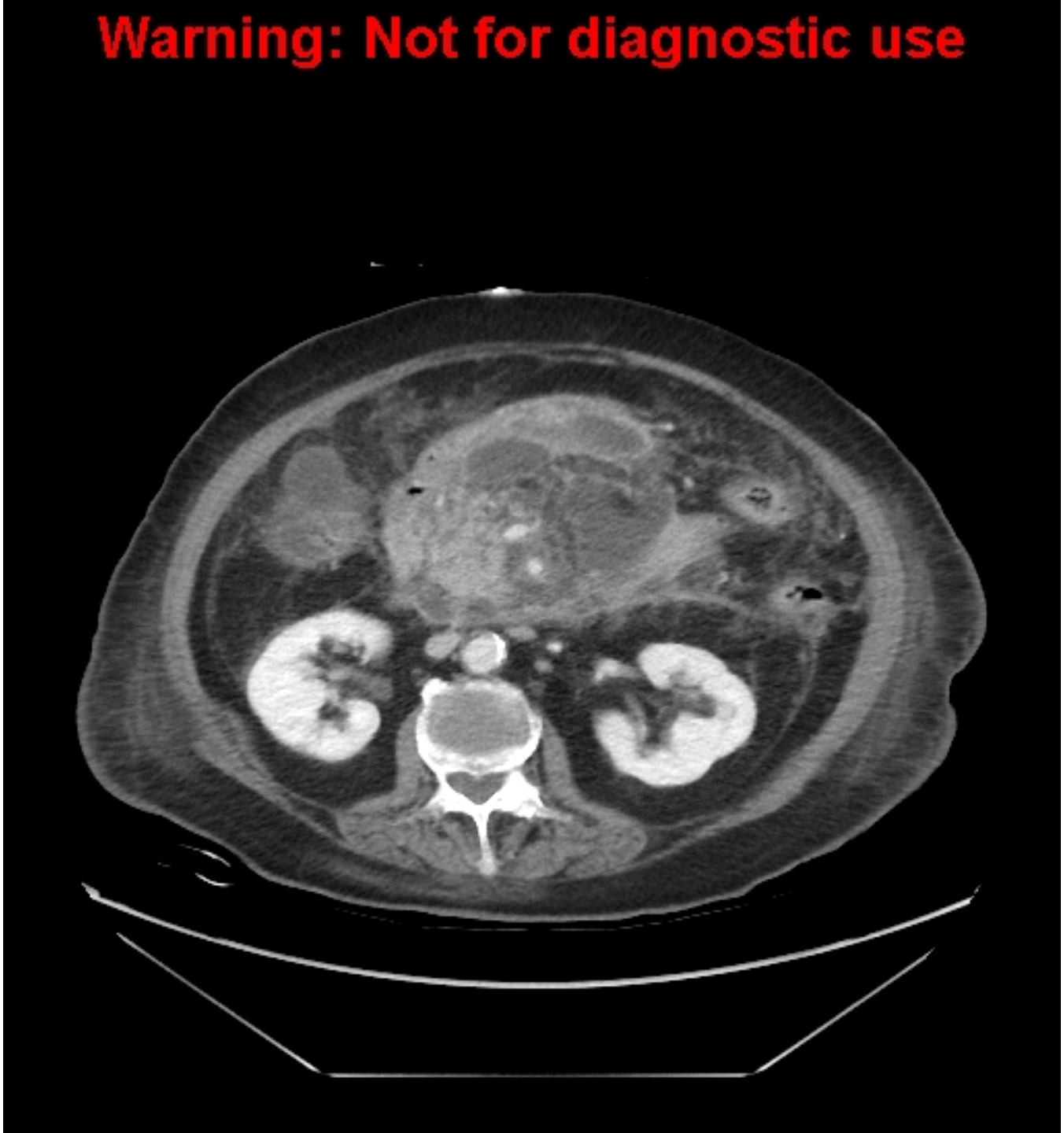
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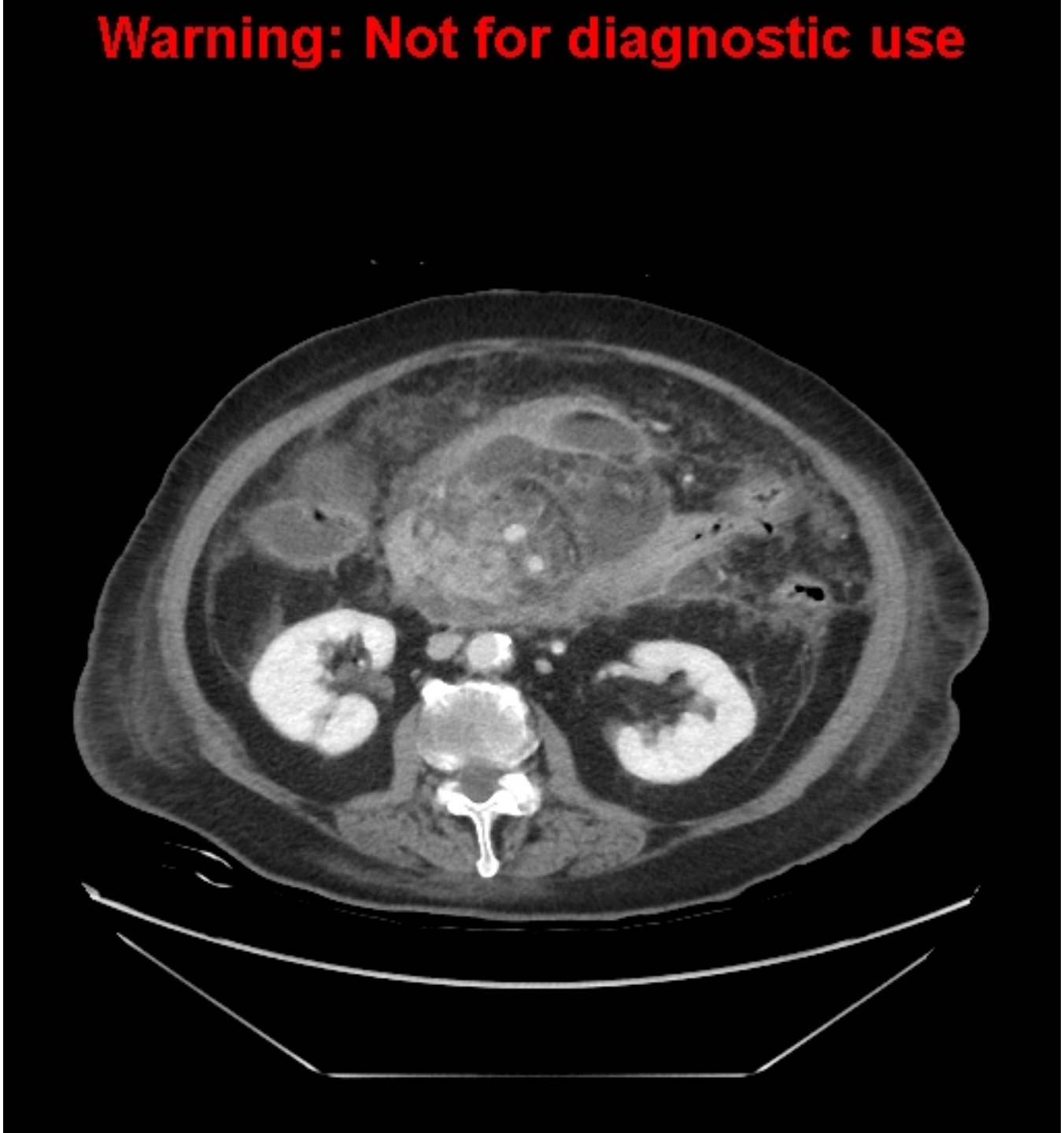
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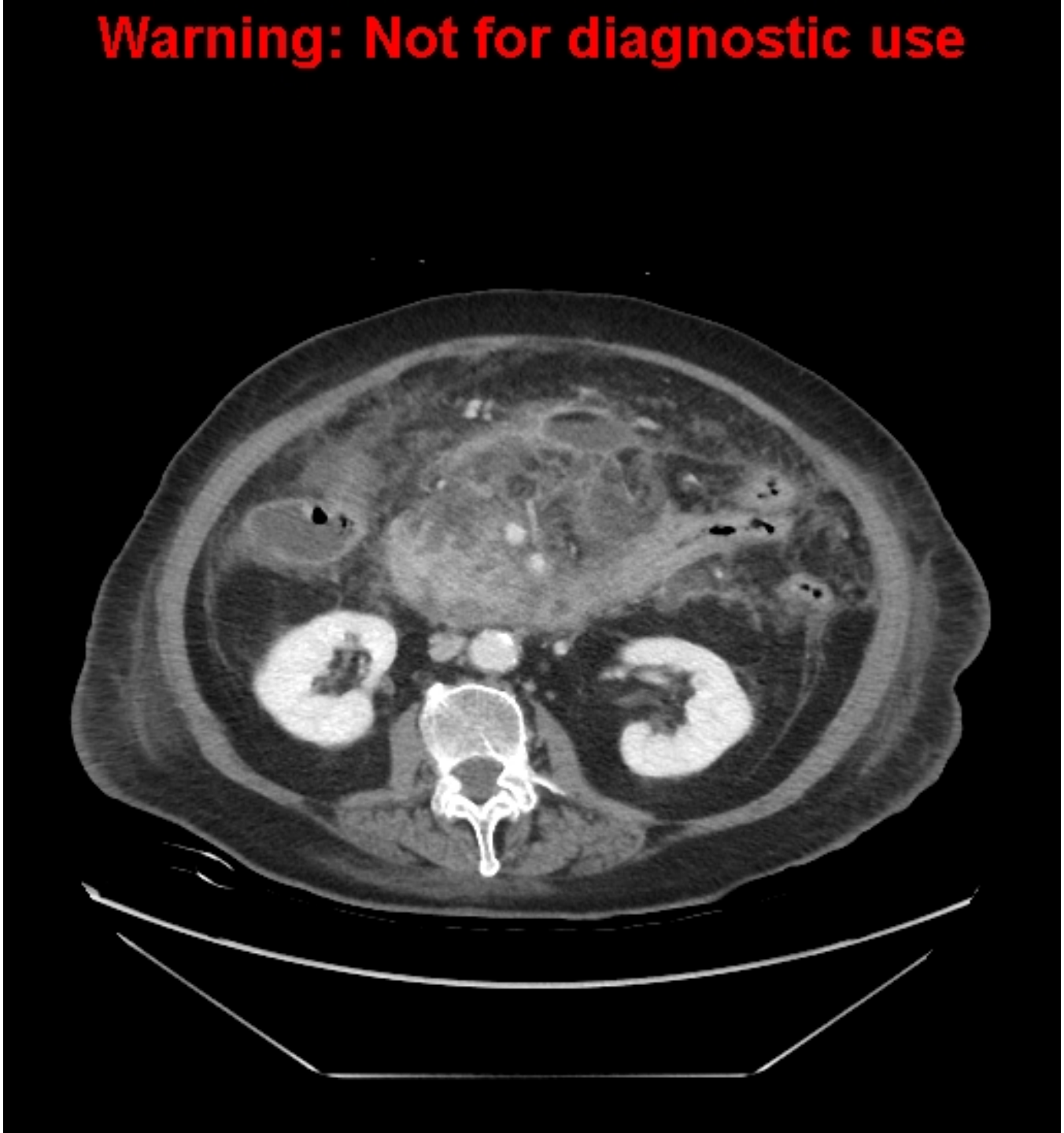

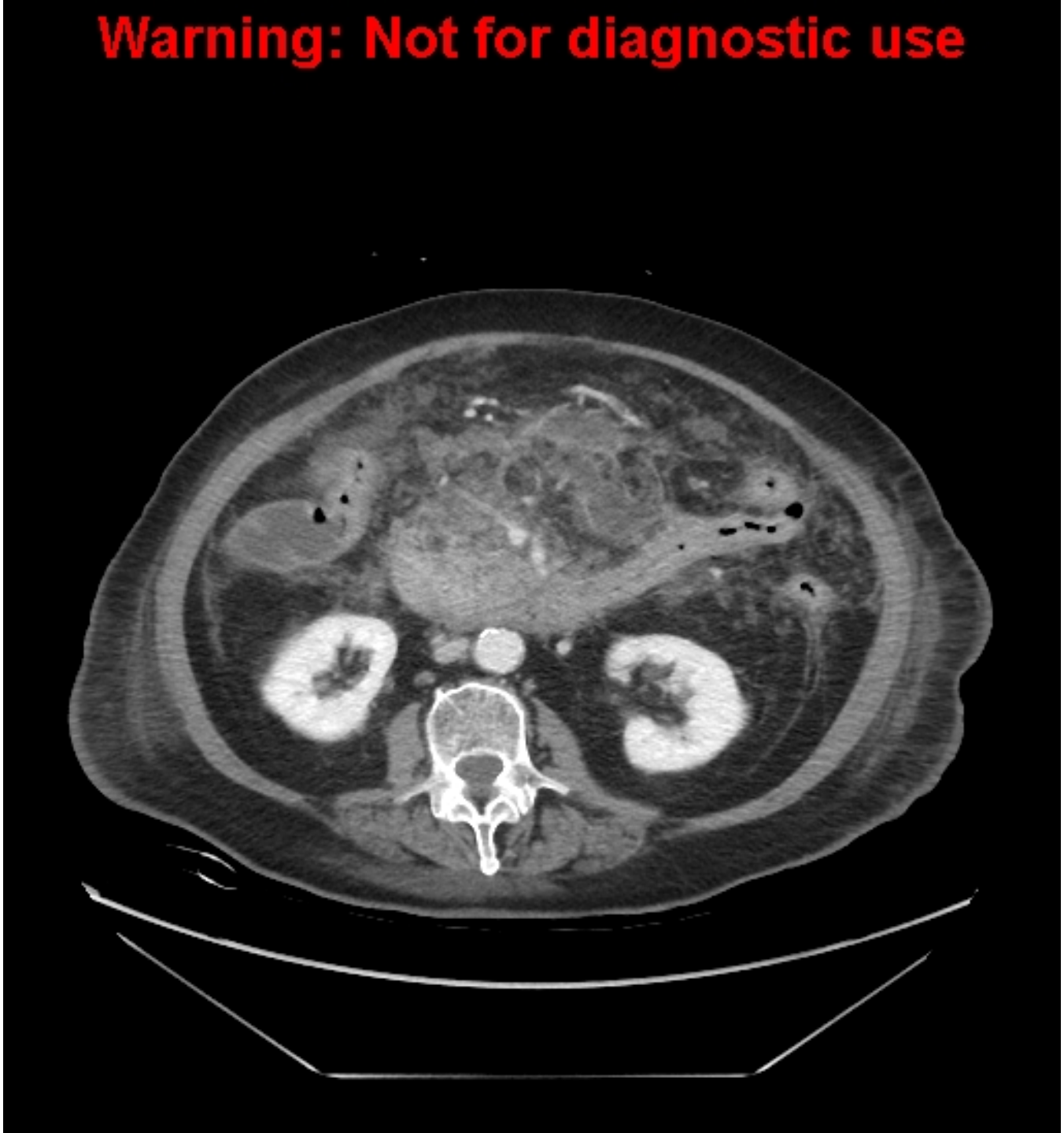
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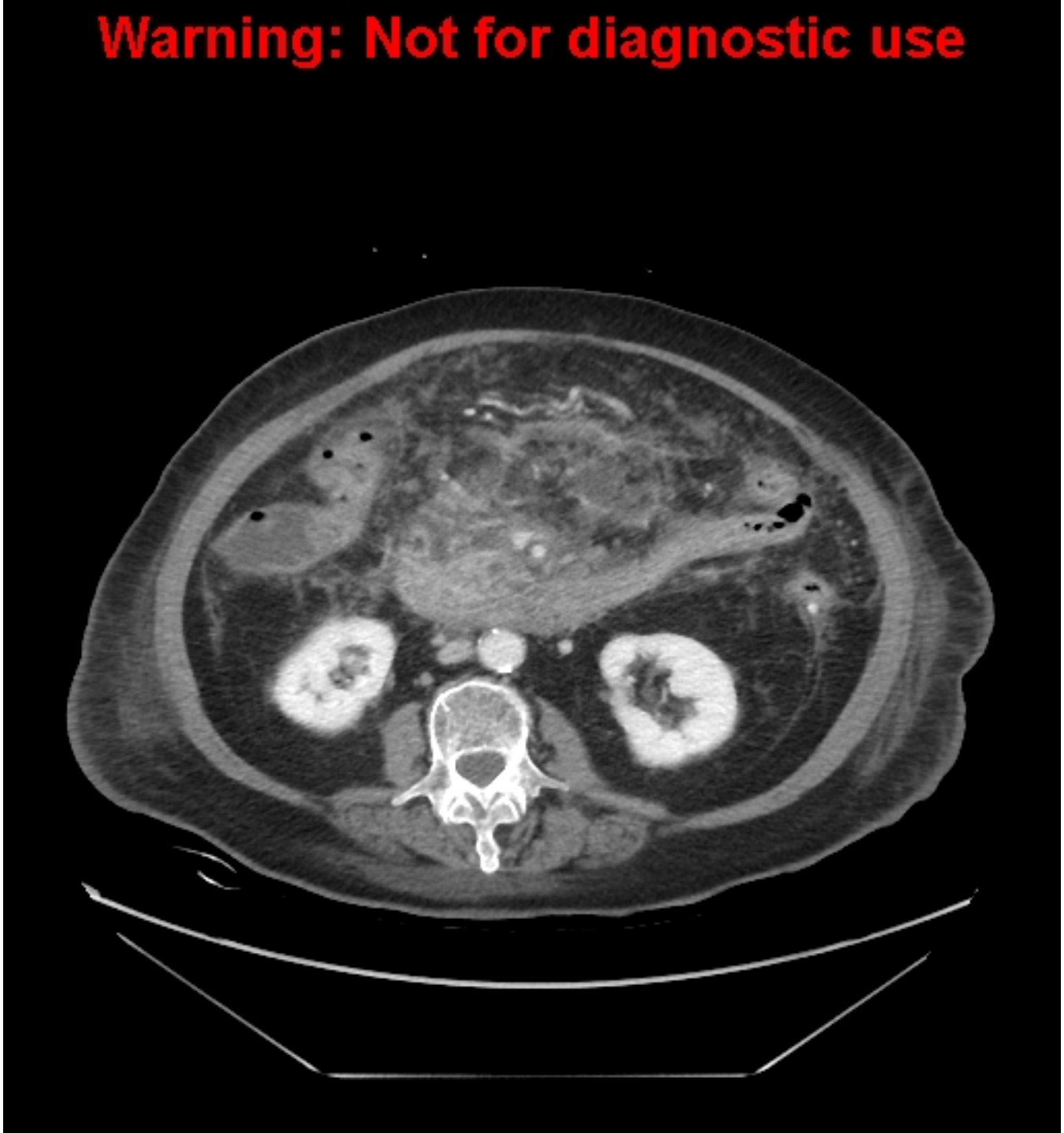

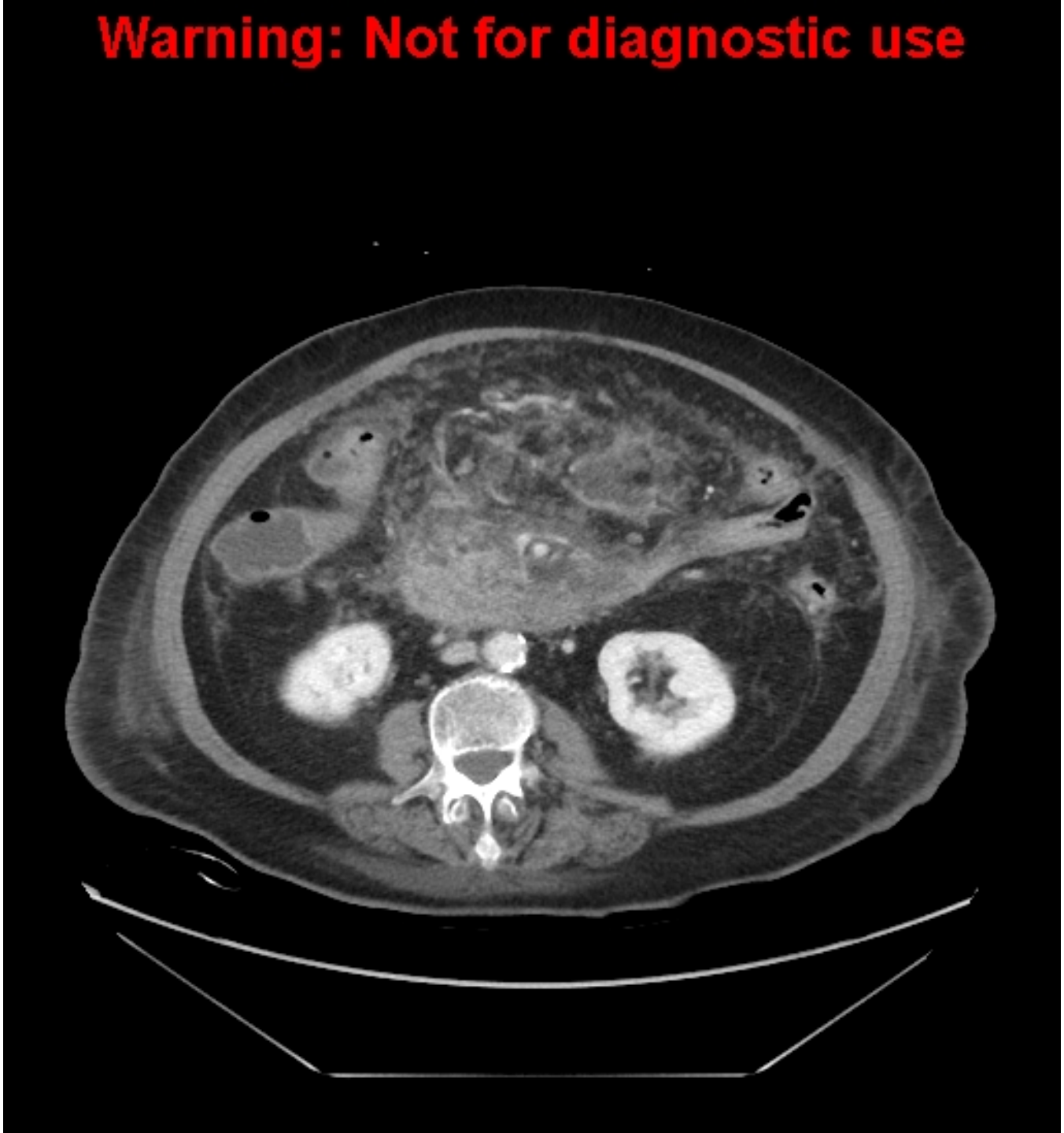

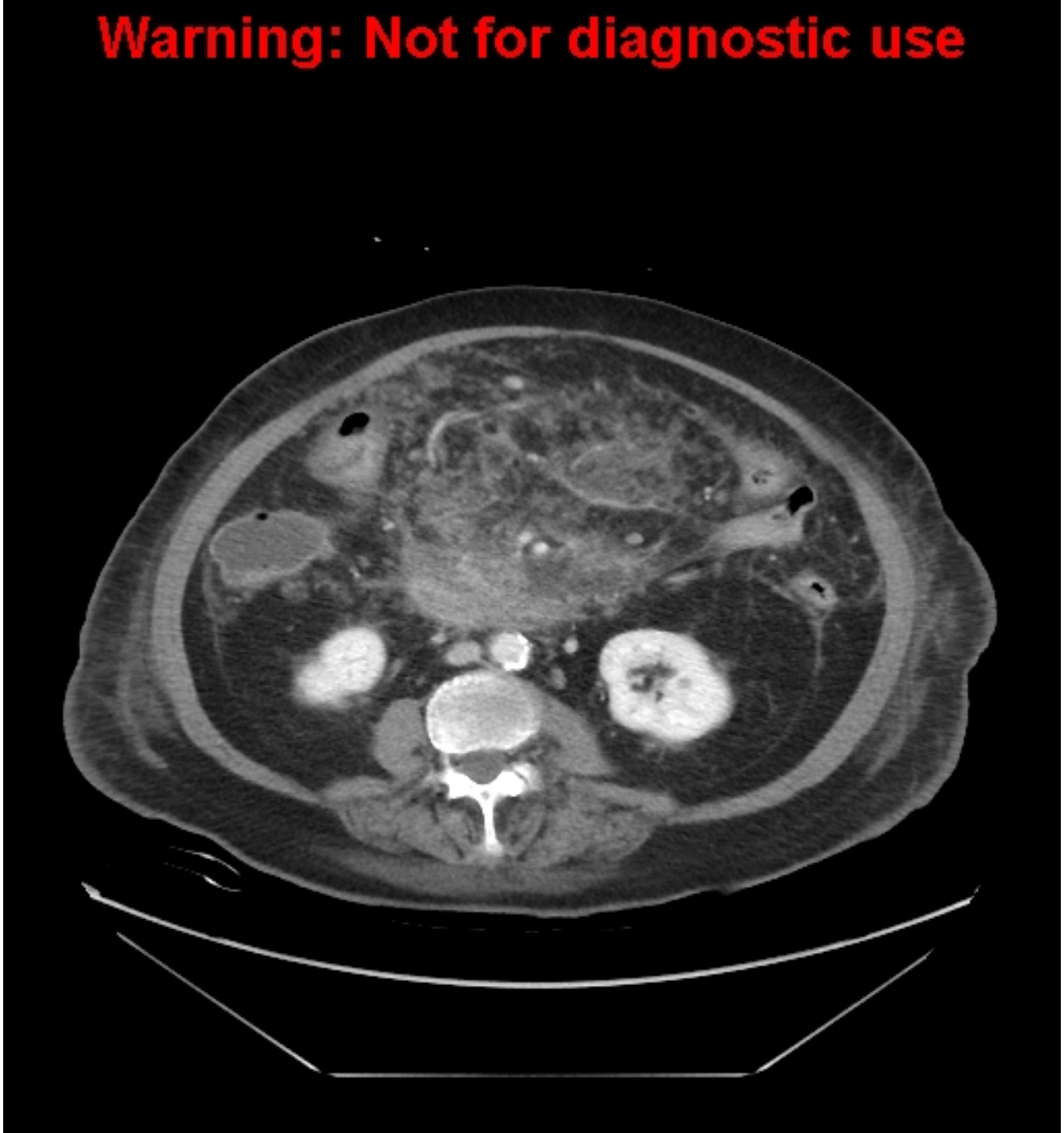
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Suggestions?

Summary

- The management of acute pancreatitis continues to evolve as technology and our understanding of the disease improves
- The initial management of SAP is generally conservative and consists of appropriate severity scoring, imaging, nutritional support, and resuscitation in an intensive care setting
- Optimal treatment requires a multidisciplinary approach
  - Pancreatic surgery, medical pancreatology, advanced therapeutic endoscopy, radiology, critical care, nutrition, genetics