

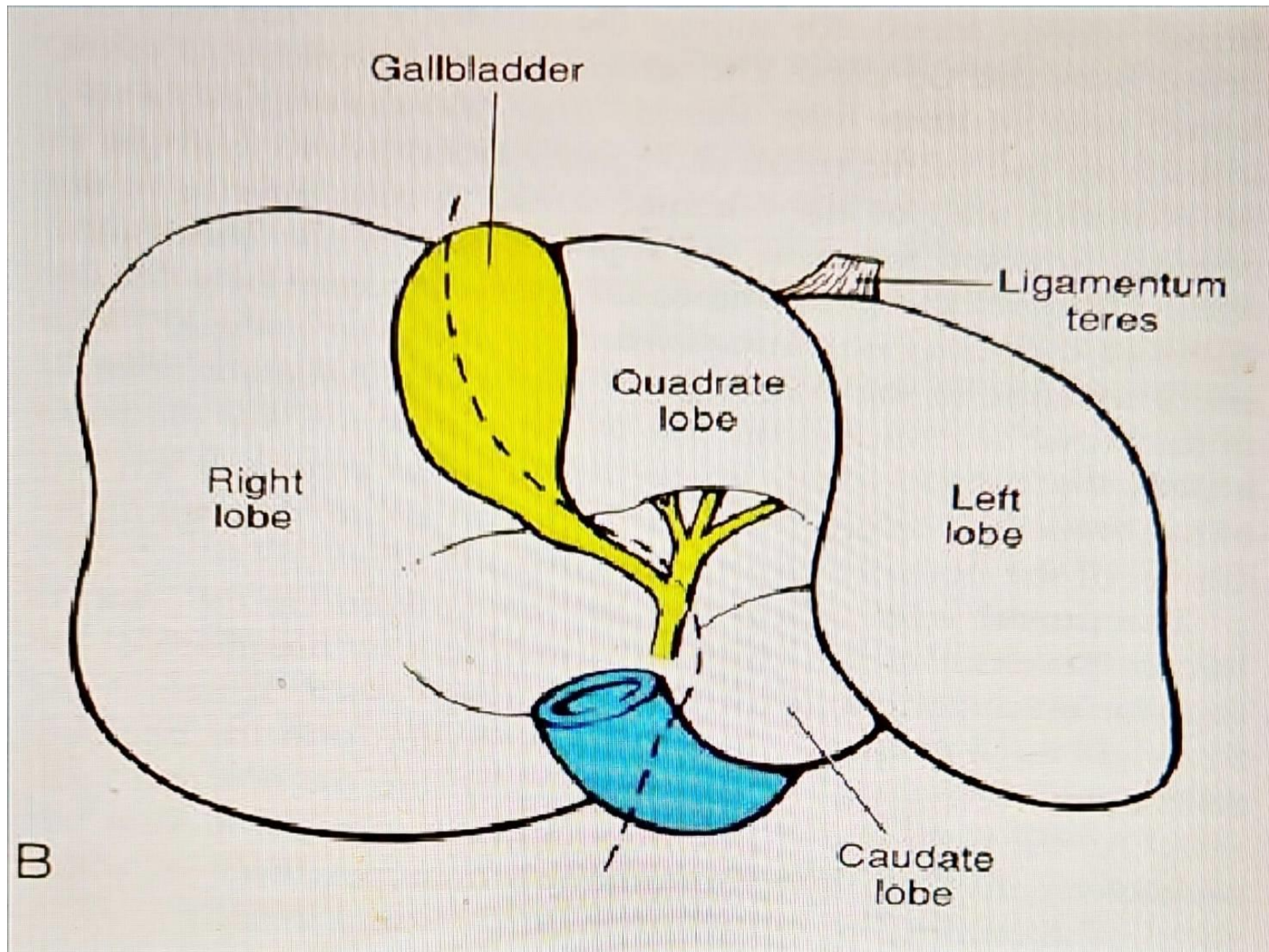
Imaging and Classification of liver Trauma

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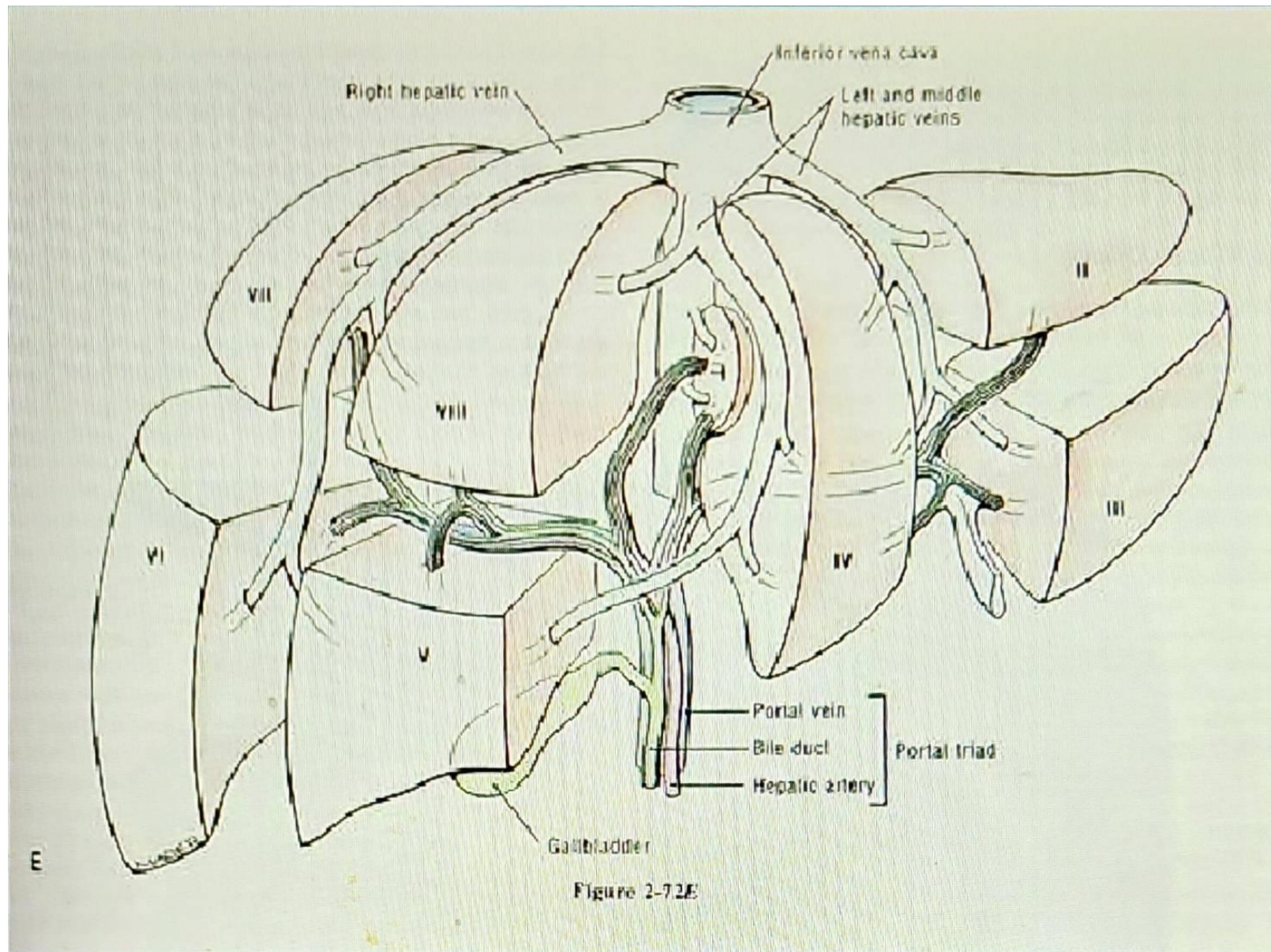
ANATOMY

- Lobes**
- Segments**
- Ligaments**
- Blood vessels**

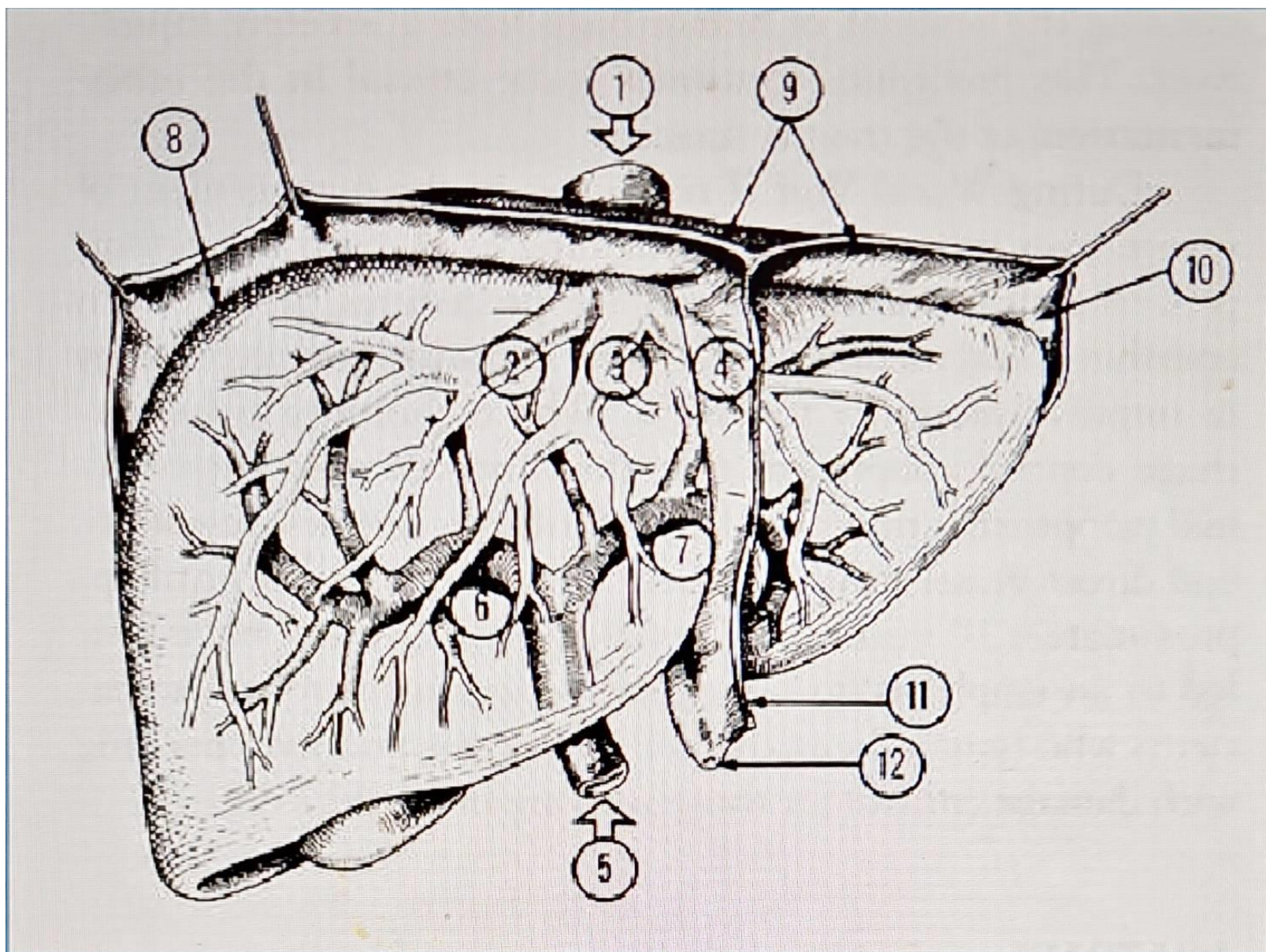
Lobes



Segments



Ligaments



AAST LIVER INJURY SCALE (1994 REVISION)

Grade 1

**Hematoma :Subcapsular nonexpanding,
<10% surface area**

**Laceration :Capsular tear, nonbleeding,
< 1 cm parenchymal depth**

Grade 2

**Hematoma : Subcapsular, nonexpanding,
10%-50% surface area:
intraparenchymal,
nonexpanding, <10 cm in
diameter**

**Laceration: Capsular tear, active bleeding,
1-3 cm parenchymal depth, < 10
cm in length**

Grade 3

**Hematoma : Subcapsular, >50% surface area,
expanding ; ruptured
subcapsular hematoma with
active bleeding ;
intraparenchymal, > 10 cm or
expanding**

Laceration : >3 cm parenchymal depth

Grade 4

**Hematoma : ruptured intraparenchymal
hematoma with active bleeding**

**Laceration : parenchymal disruption
involving 25%-75% of hepatic
lobe or 1-3 Couinaud's
segments within a single lobe**

Grade 5

Laceration : parenchymal disruption
involving >75% of hepatic lobe
or >3 Couinaud's segments
within a single lobe

Vascular : juxtahepatic venous injuries
(i.e., injuries to retrohepatic
vena cava or central major
hepatic veins)

Grade 6

Vascular : hepatic avulsion

Imaging for Liver Trauma

- **Plain abdomen**
- **Focused Abdominal Sonography for Trauma (FAST)**
- **CT scan**
- **Angiography and Embolization**



Plain abdomen

FAST

THE RED

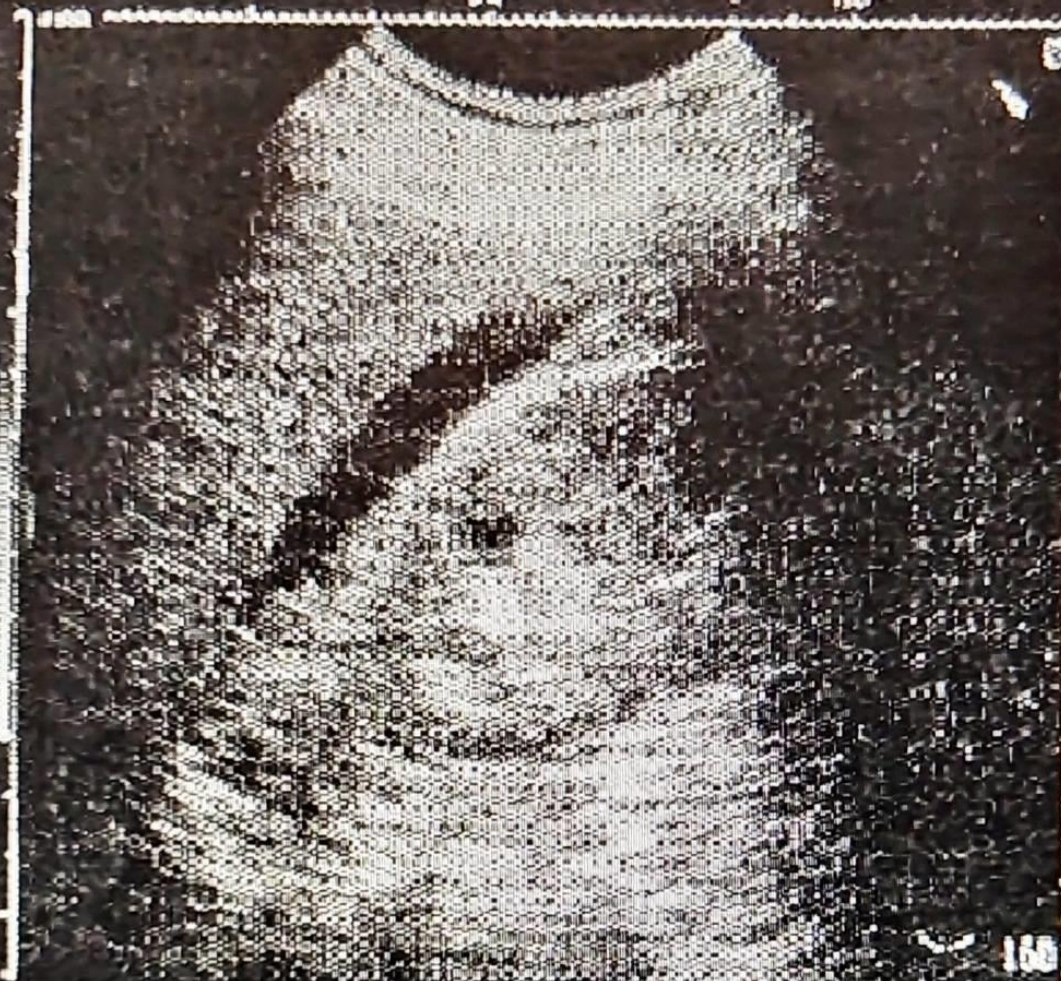
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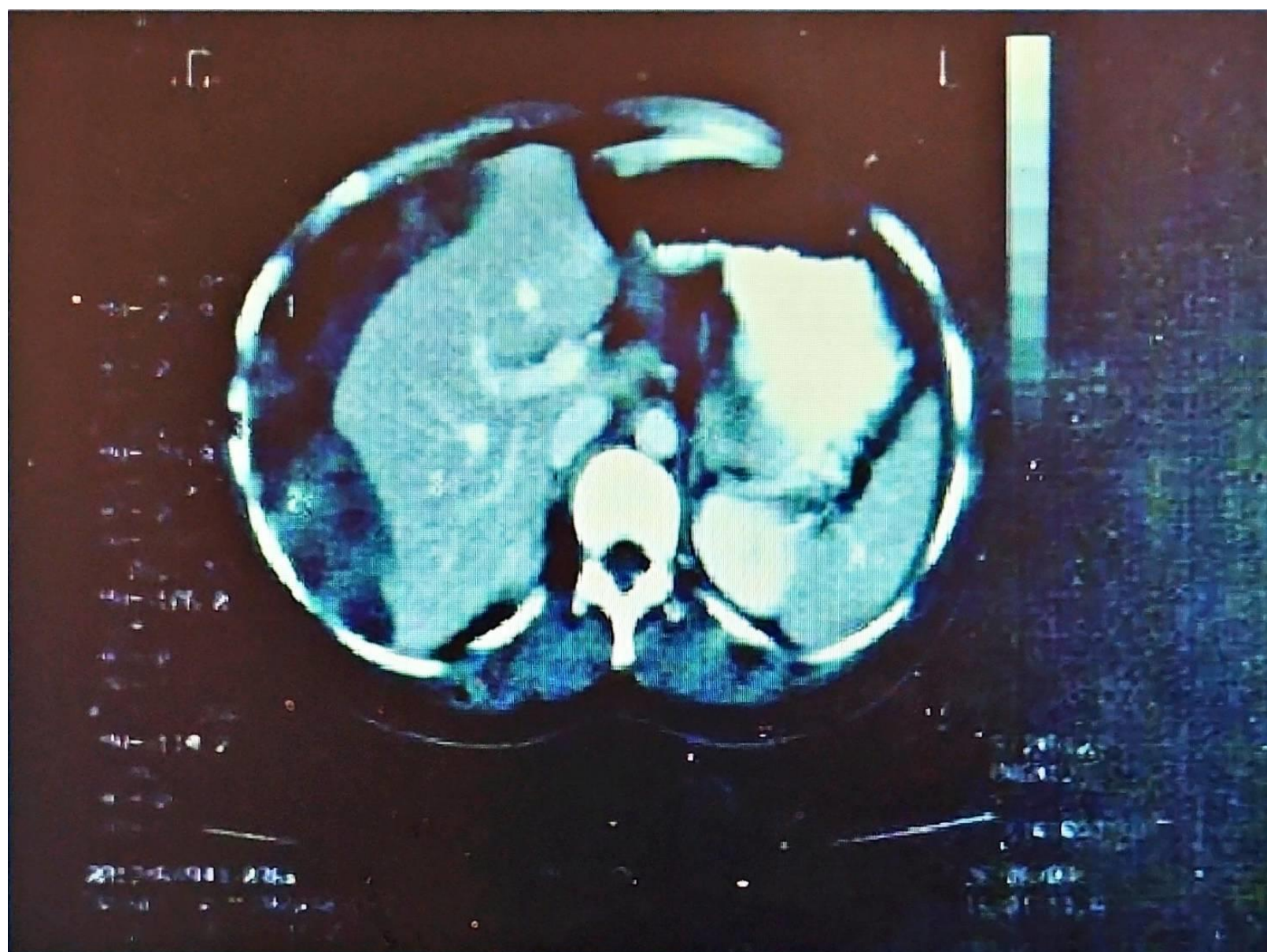
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CT SCAN





ANGIOGRAM AND EMBOLIZATION

