

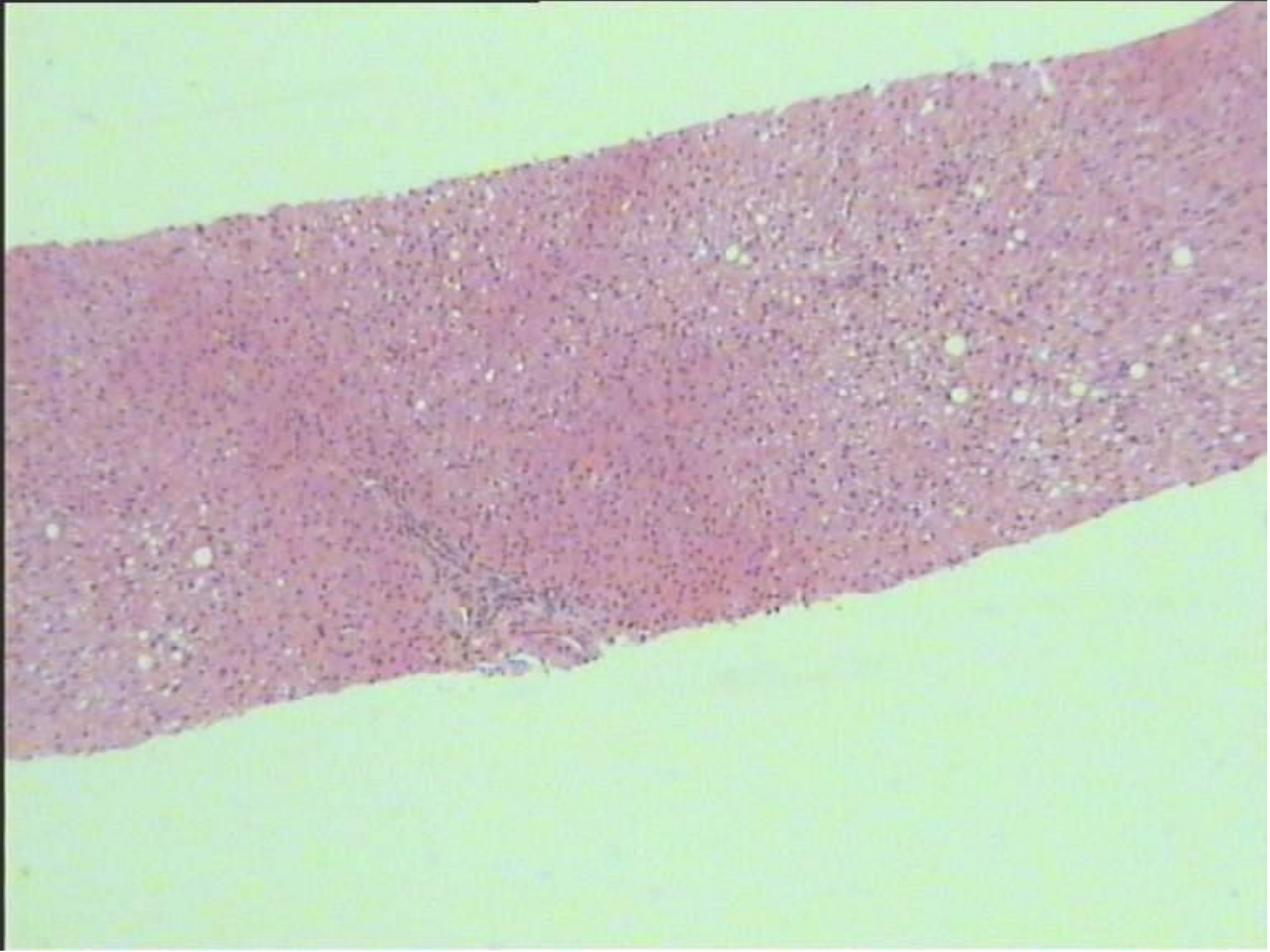
National Liver Pathology EQA Scheme

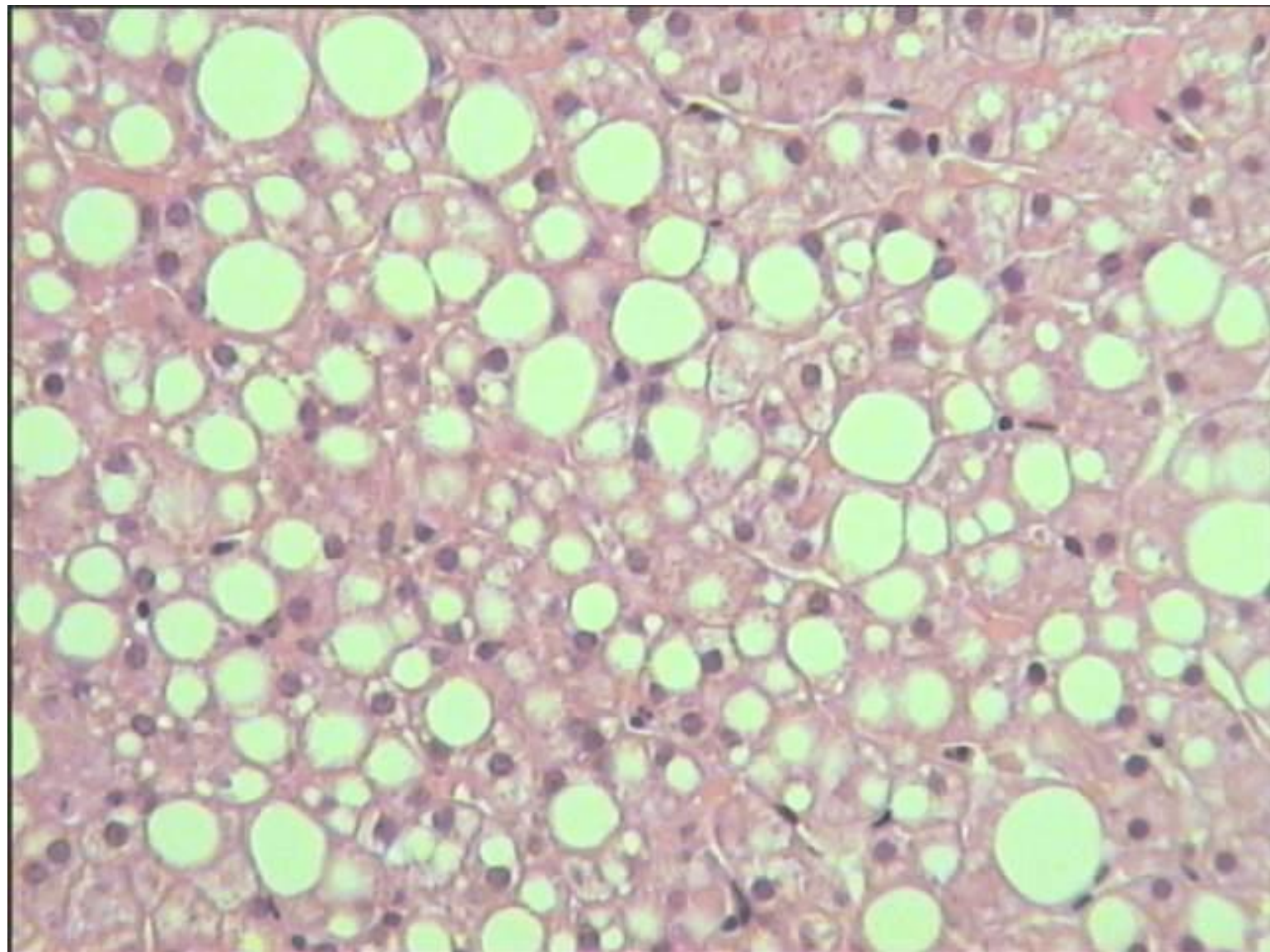
Open Meeting, July 1st 2003. Bristol

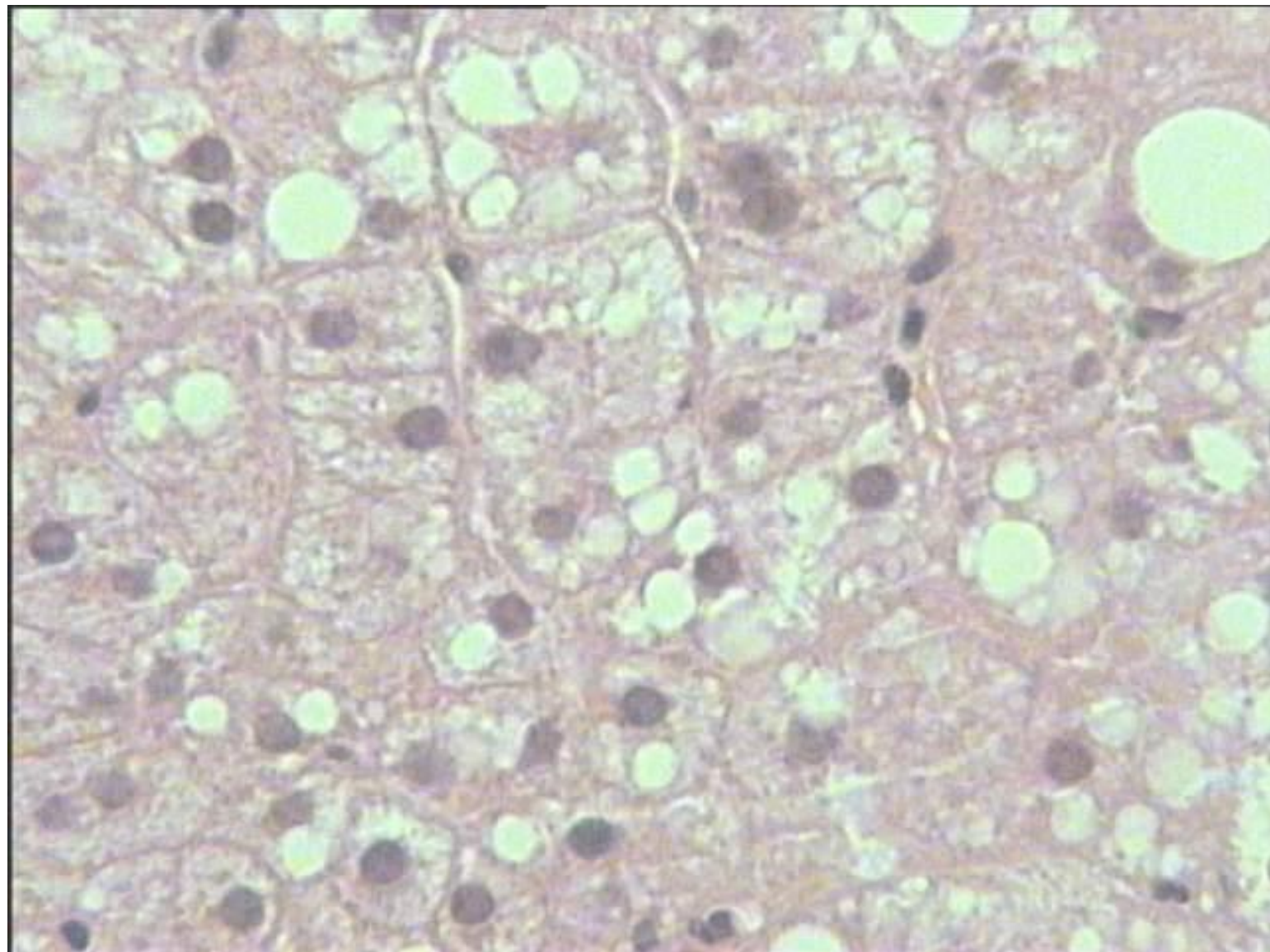
Case 171 - history

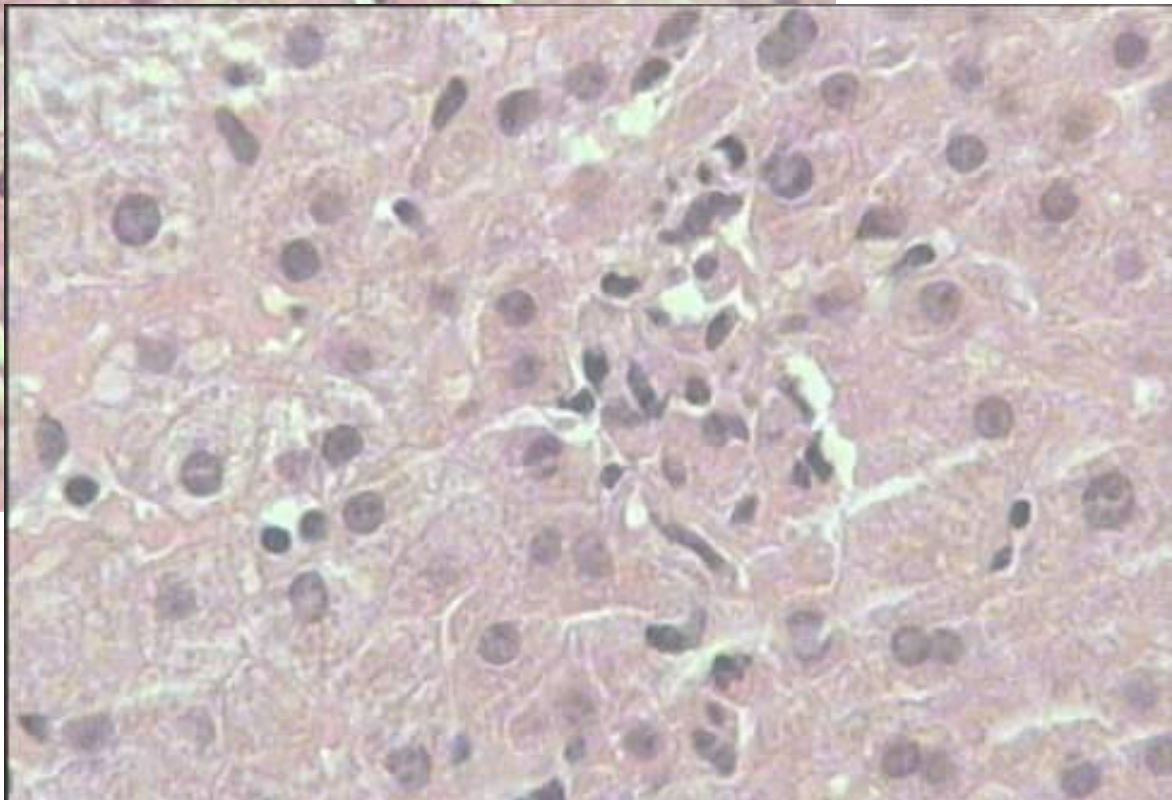
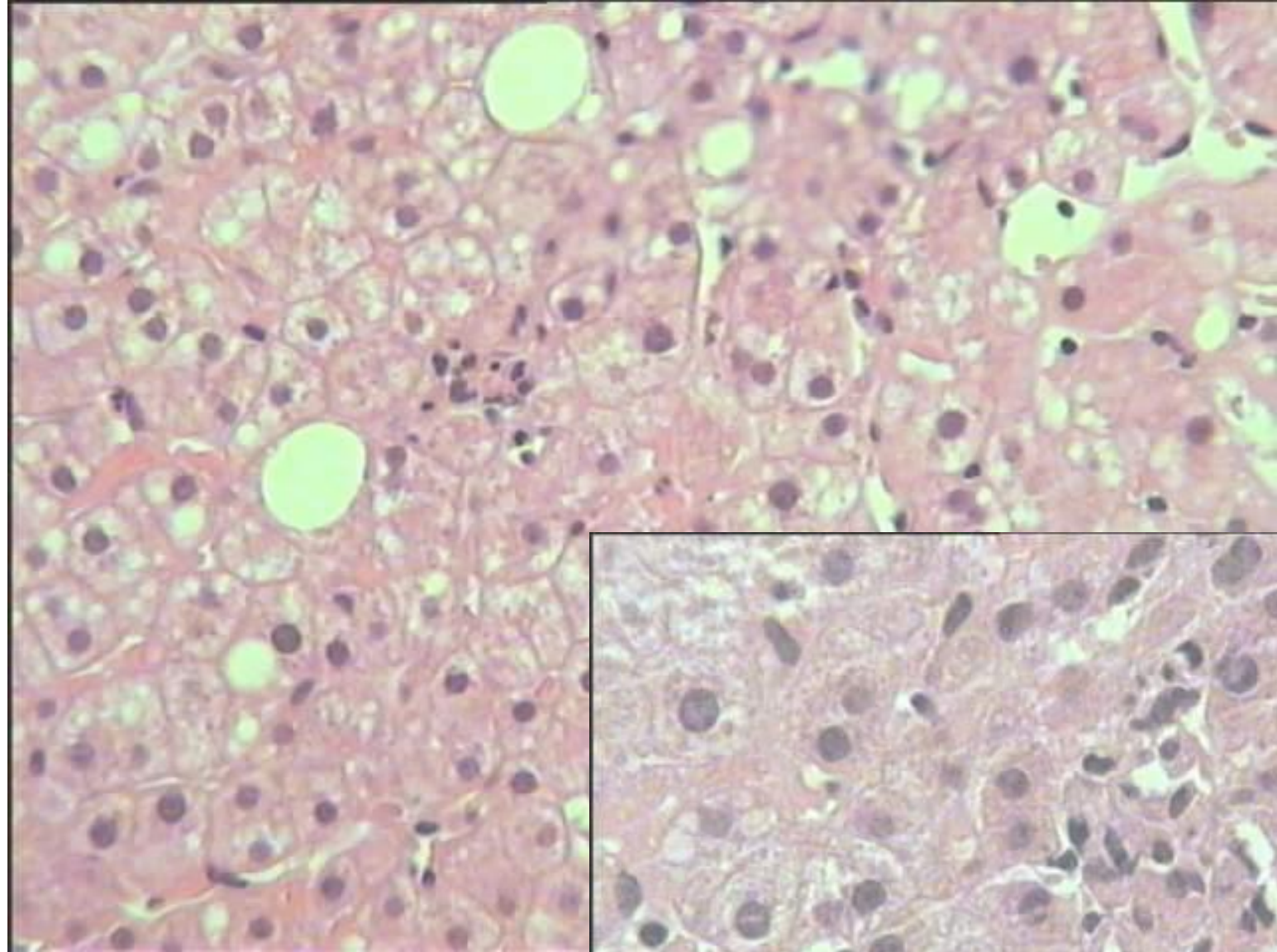
Female, 35 years. Abnormal LFTs

Three cores of liver tissue









Case 171-Diagnoses

Steatohepatitis	142
Steatosis (fatty change, fatty liver)	223
steatosis/minimal steatohepatitis	10
fatty change + mild chronic hepatitis	30
non-specific	25
PBC	10

Case 171 comments

Steatohepatitis minimal or mild: 5 people

?NRH: 5 people

need VG, retic, Ubiquitin: several

More history: most

?circulatory disturbance, ?portal hypertension: 3

some thought steatosis + mild chronic hepatitis

Follow up?

Not discussed with pathologist. Reported as non-specific hepatitis. No relevant clinical details available

Case 171 Discussion

- Accept first four diagnoses

Fibrosis is important – need connective tissue stain before recognizing steatohepatitis.

No consensus over criteria for steatohepatitis amongst members.

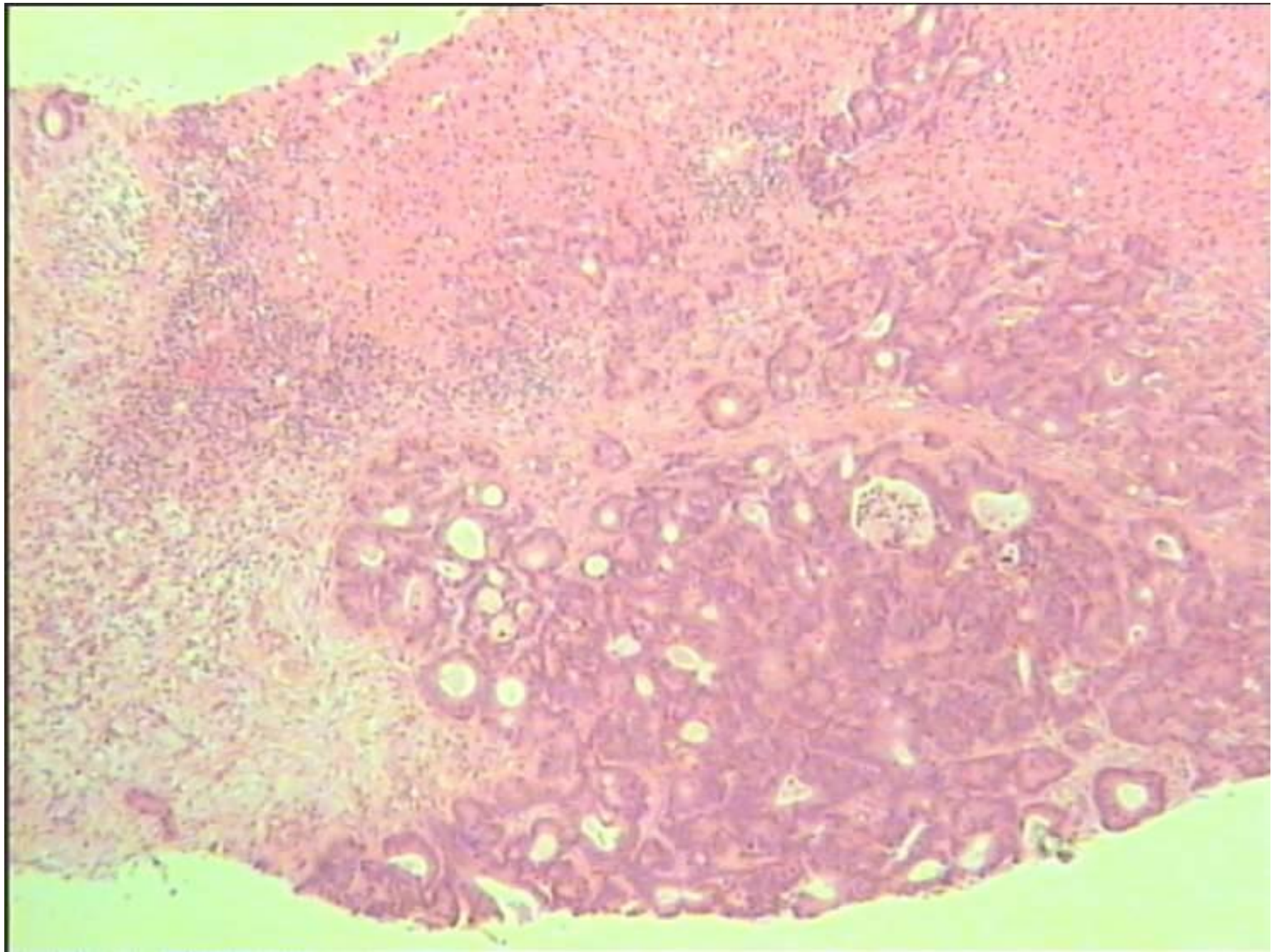
In some centres ballooning +/- Mallory bodies, +/- neutrophils, +/- fibrosis are criteria that are required for steatohepatitis, but not all use this.

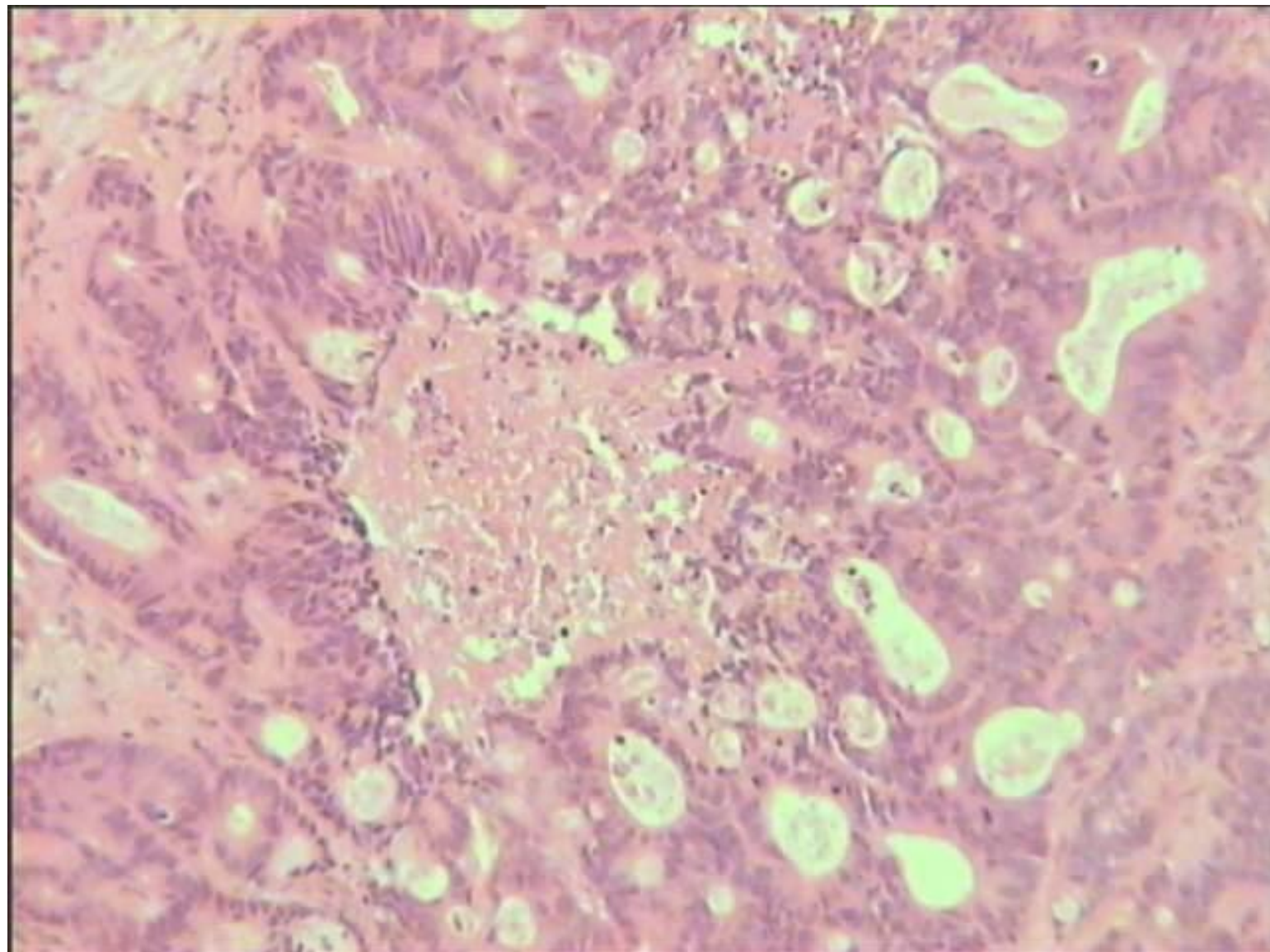
Fatty liver disease is an American umbrella term to encompass any of these. There is very little evidence on the clinical significance of these various changes, on which to base diagnosis.

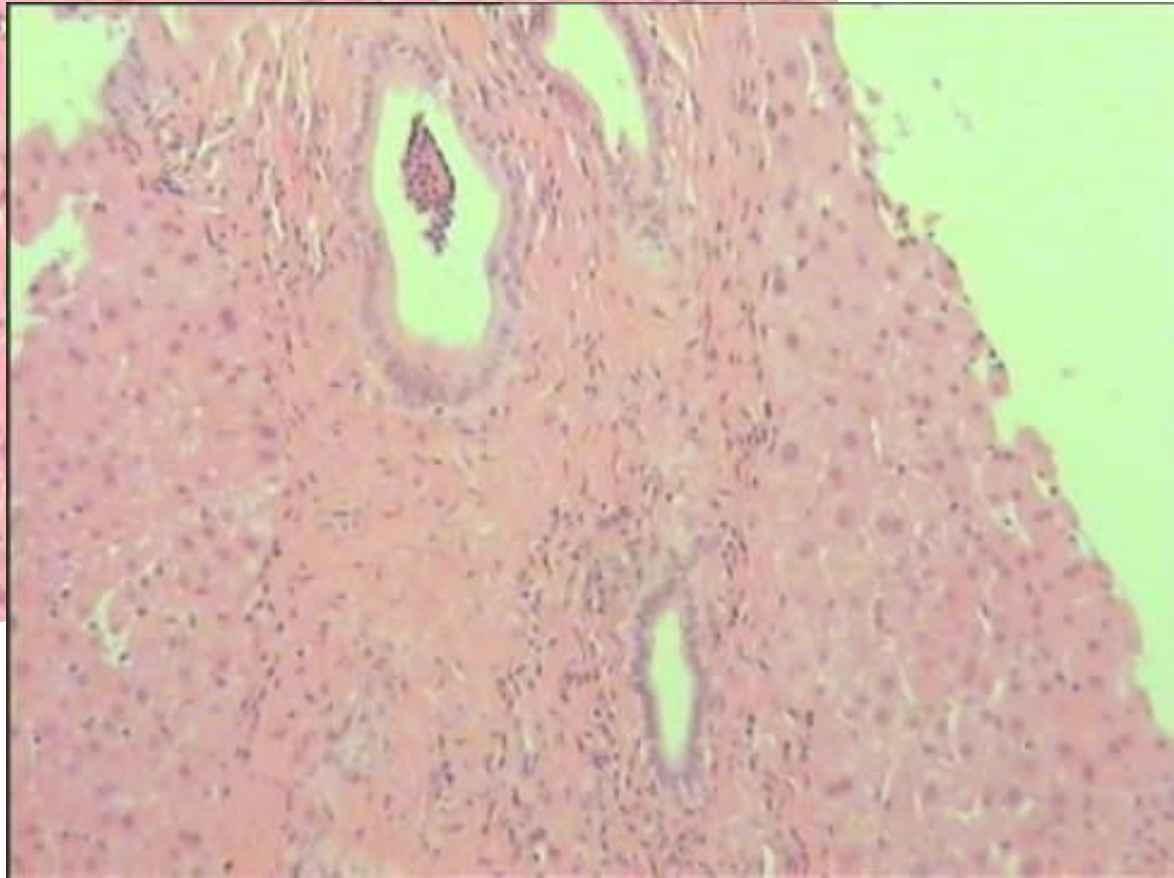
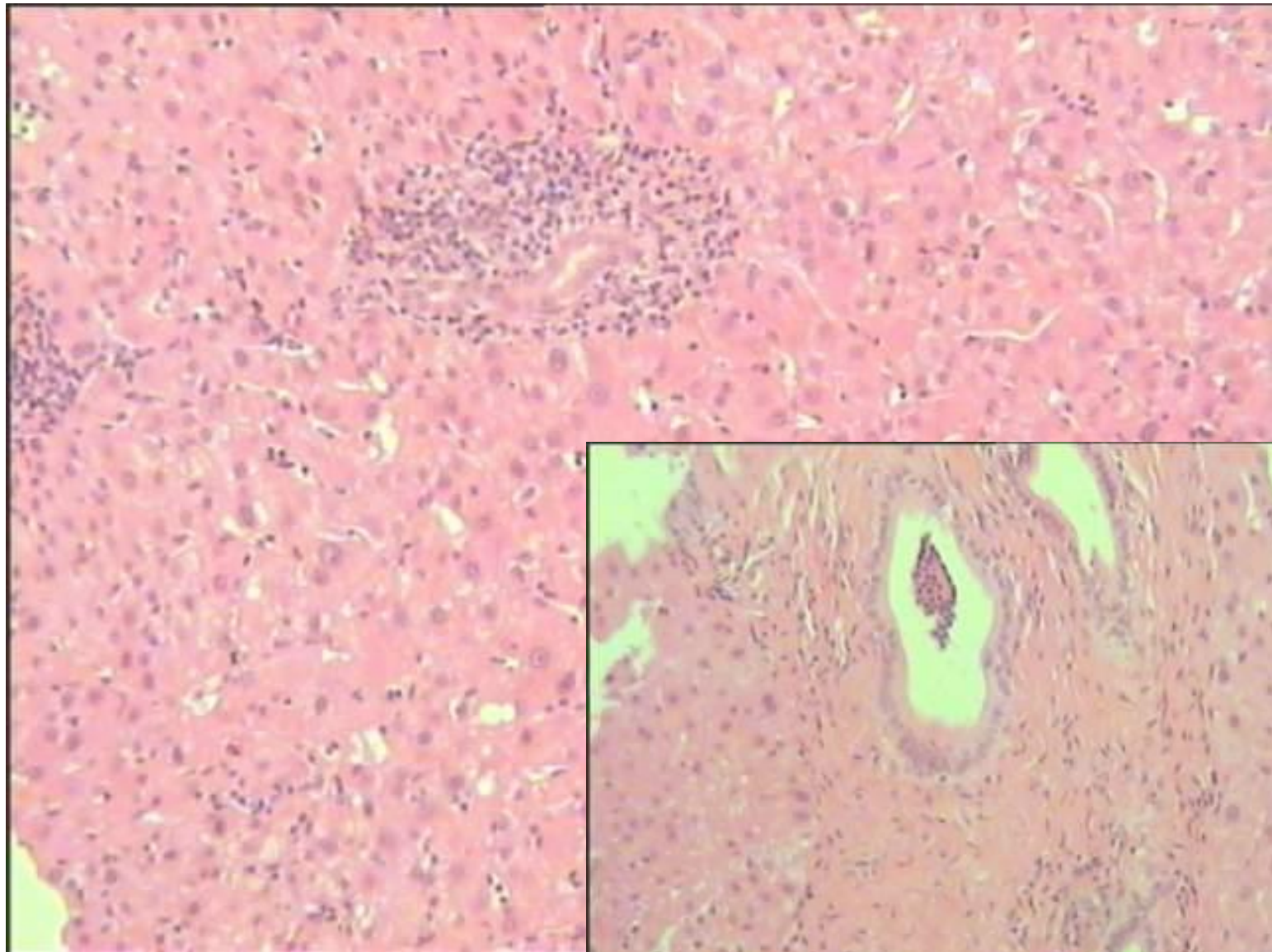
A role for a discussion group in forming a consensus on terminology amongst UK liver pathologists was discussed.

Case 172 - History

- A 65 year old man. Liver biopsy performed at the time of colectomy (for colorectal carcinoma).







Case 172- Diagnoses

Metastatic adenocarcinoma, consistent with CRC: 397.8

Primary adenocarcinoma: 0.2

Cholangiocarcinoma: 2

Adenocarcinoma: primary or secondary not stated: 10

No slide received: 30

Case 172- Comments

CK7&20, and/or review primary 7

consider upper GI primary 1

+ features due to adjacent SOL: 5

with granulomas: 1

with secondary sclerosing cholangitis 1

Follow-up: *Dr Sherwood: metastatic*

adenocarcinoma biopsied at time of colectomy

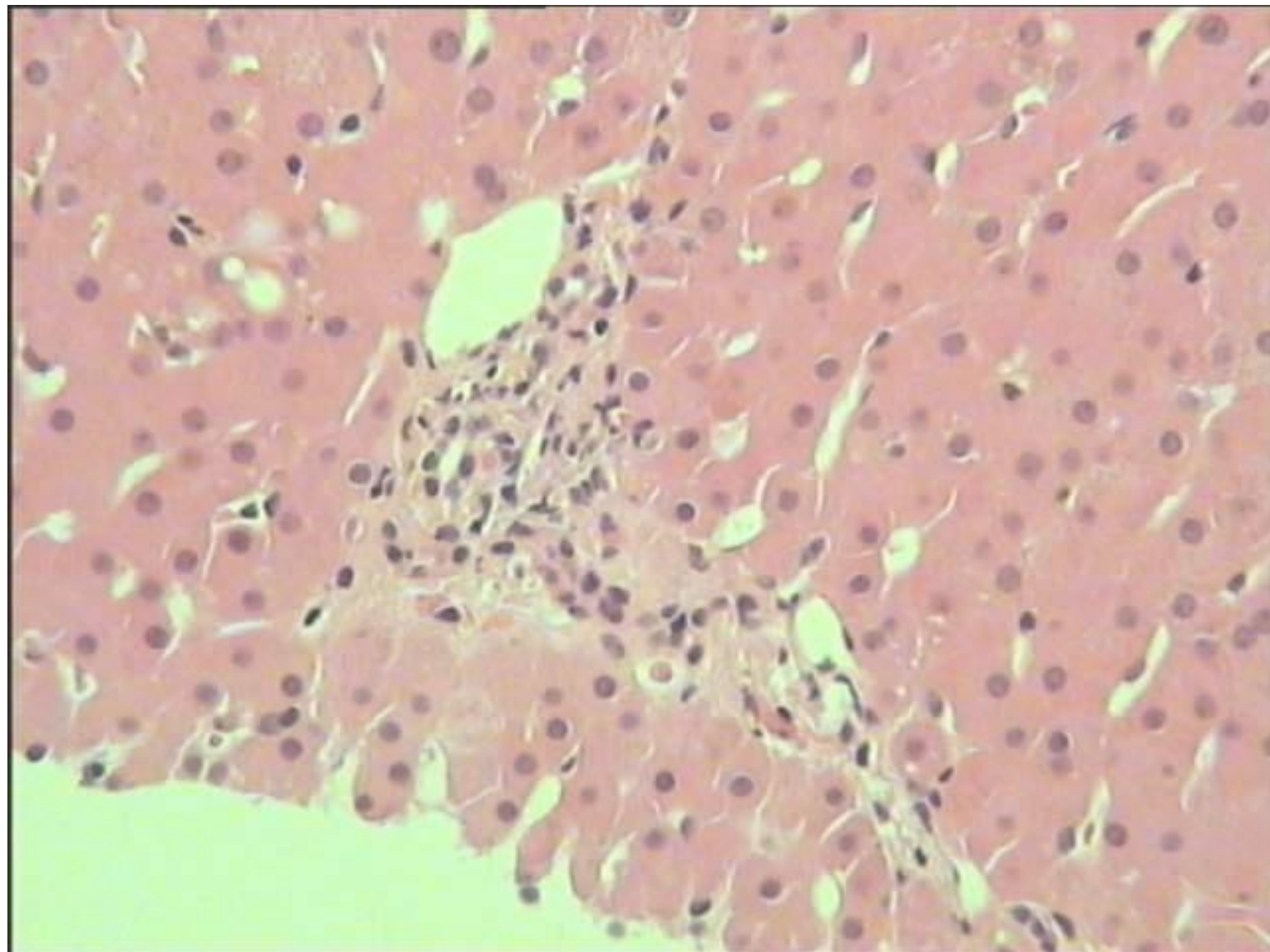
Case 172 – Discussion:

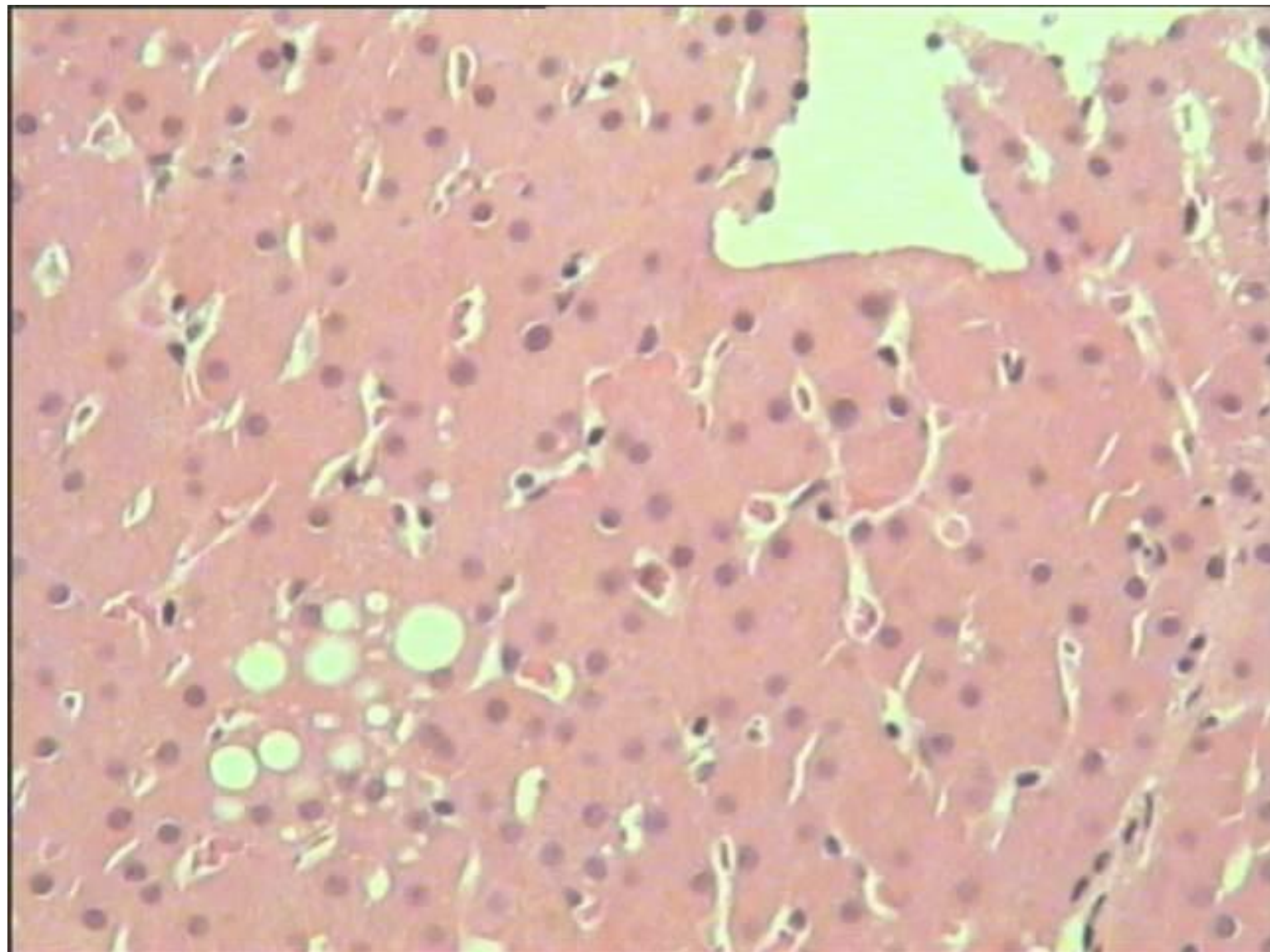
Clear consensus agreed to accept only metastatic adenocarcinoma (+/- consistent with CRC).

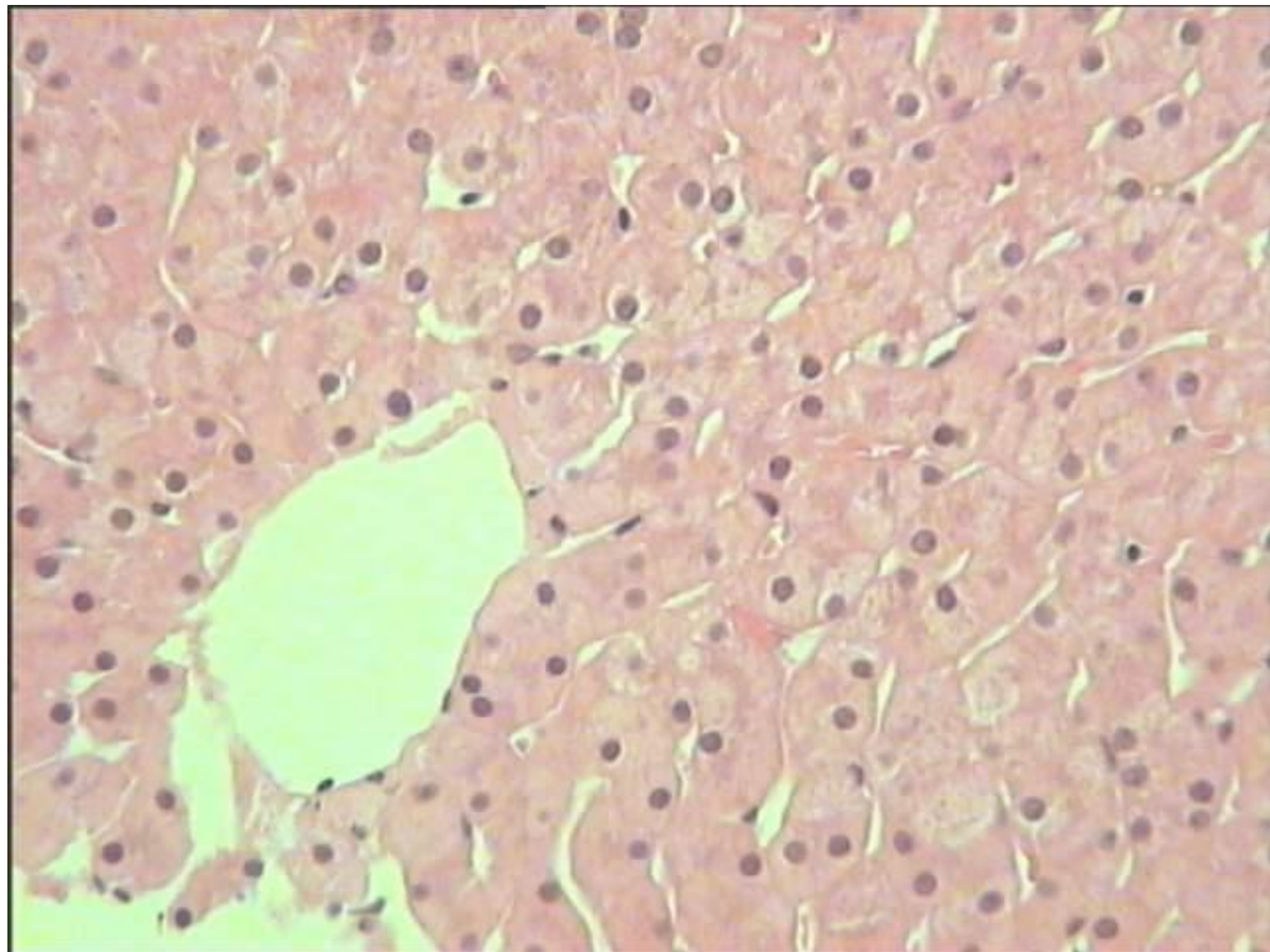
Most would only do further investigation – cytokeratin etc – if clinical uncertainty of origin of metastasis.

Case 173 - History

Hepatitis C carrier for 5 years.







Case 173 (Educational)- Diagnoses

Normal/within normal limits:	118
Almost normal, no significant abnormality:	110
Minimal/mild steatosis:	100
Ductopaenia:	20
Minimal/mild chronic hepatitis:	42
Don't know:	10
?oncocytic metaplasia, ?amyloid, focal cytoplasmic granularity:	30

Case 173 comments:

Special stains: several

Foam artefact 1

Follow up: *Dr Prescott: PCR +ve, LFTs normal*

Case 173 Discussion

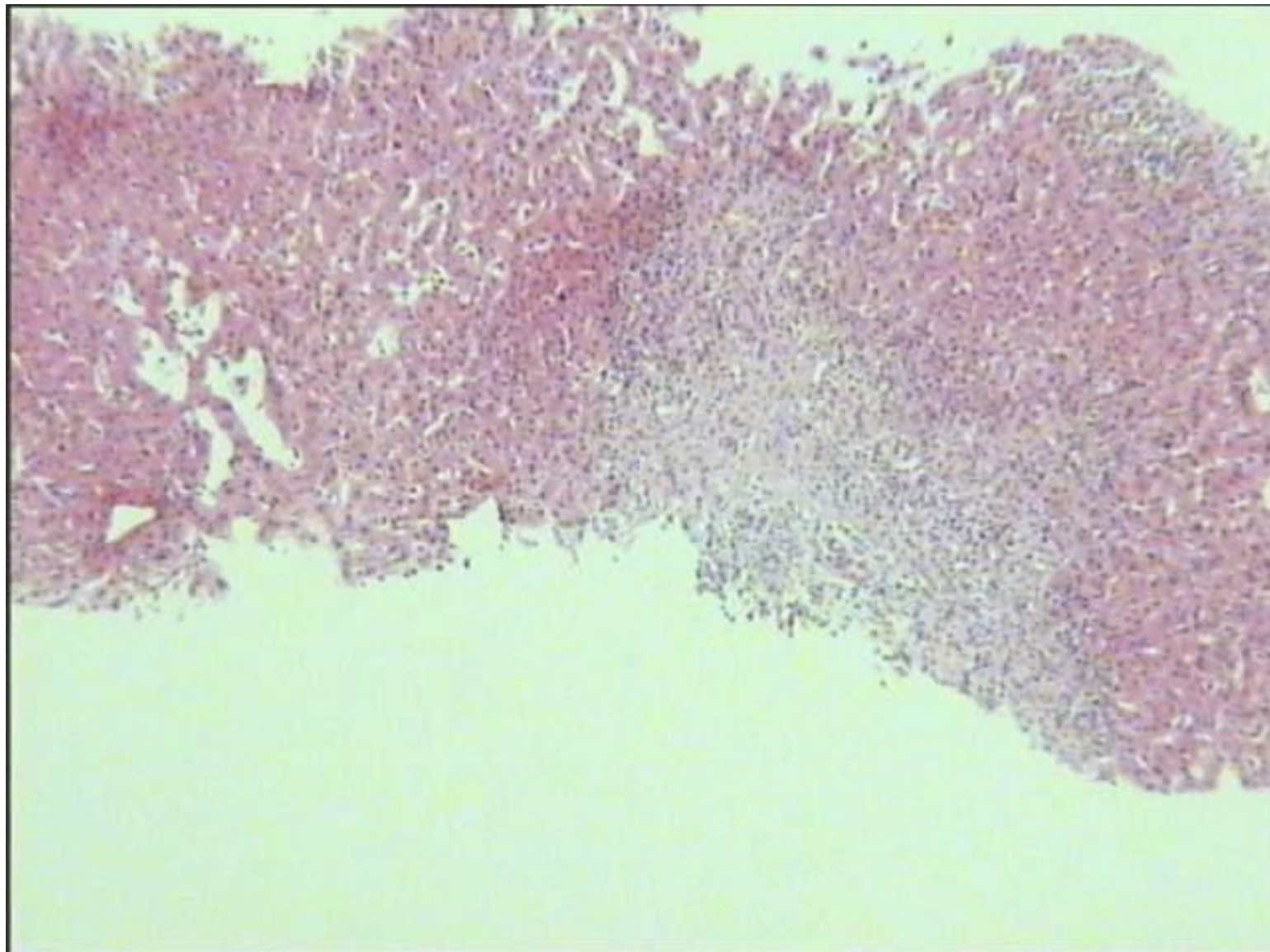
Educational case therefore not included on EQA scoring.

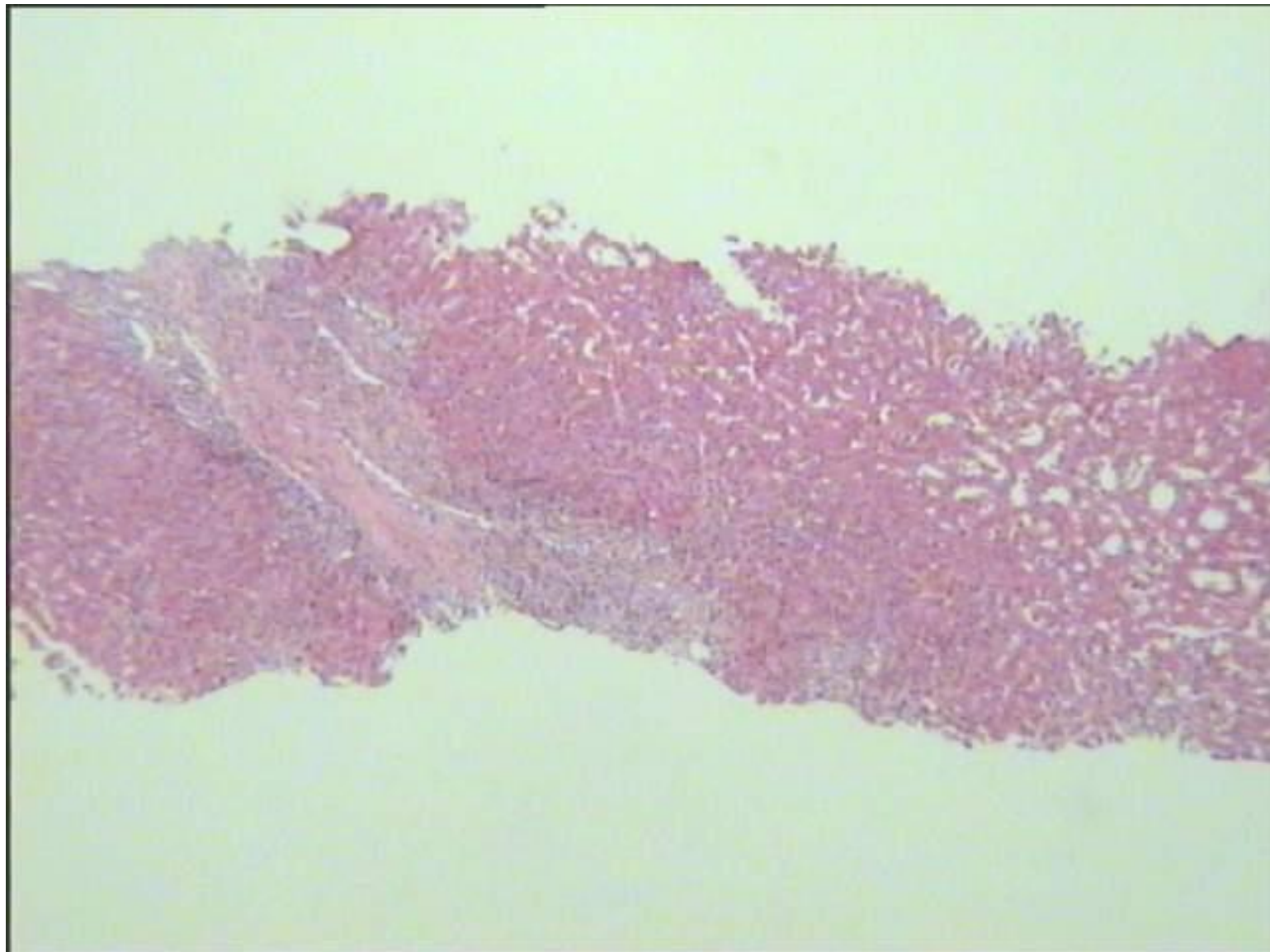
Several in audience had seen normal biopsies after years of infection with hepatitis

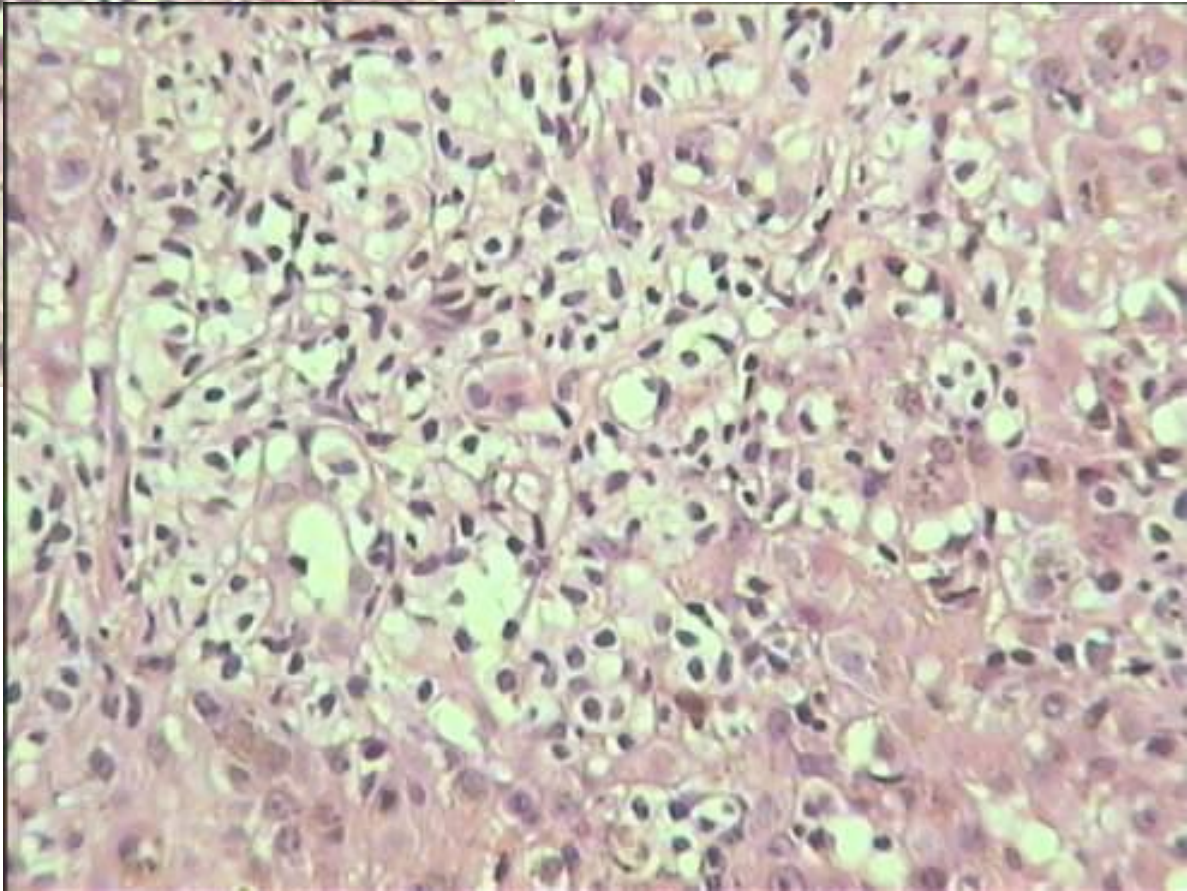
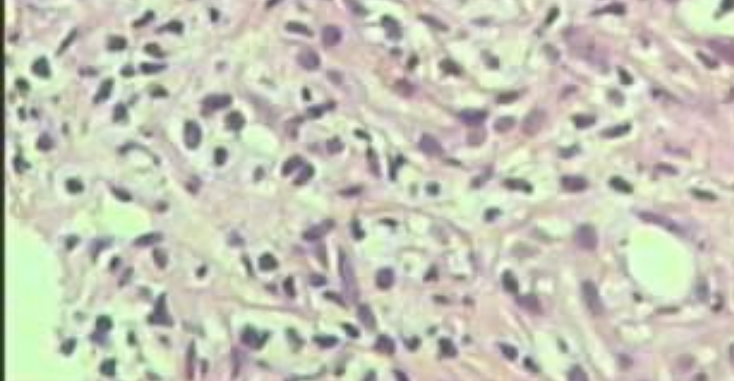
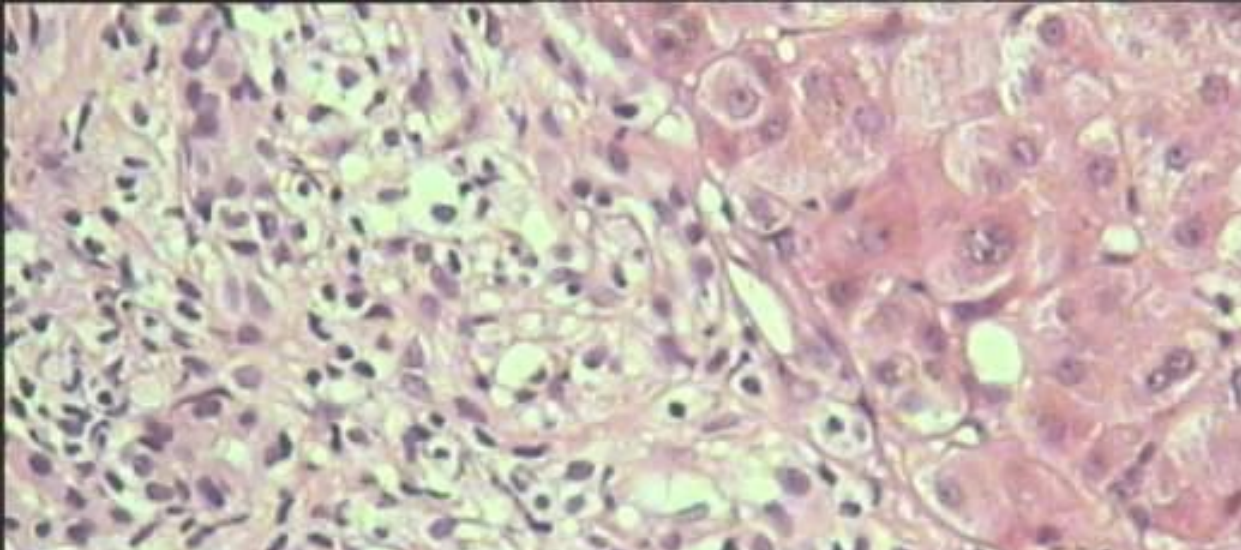
Case 174 History

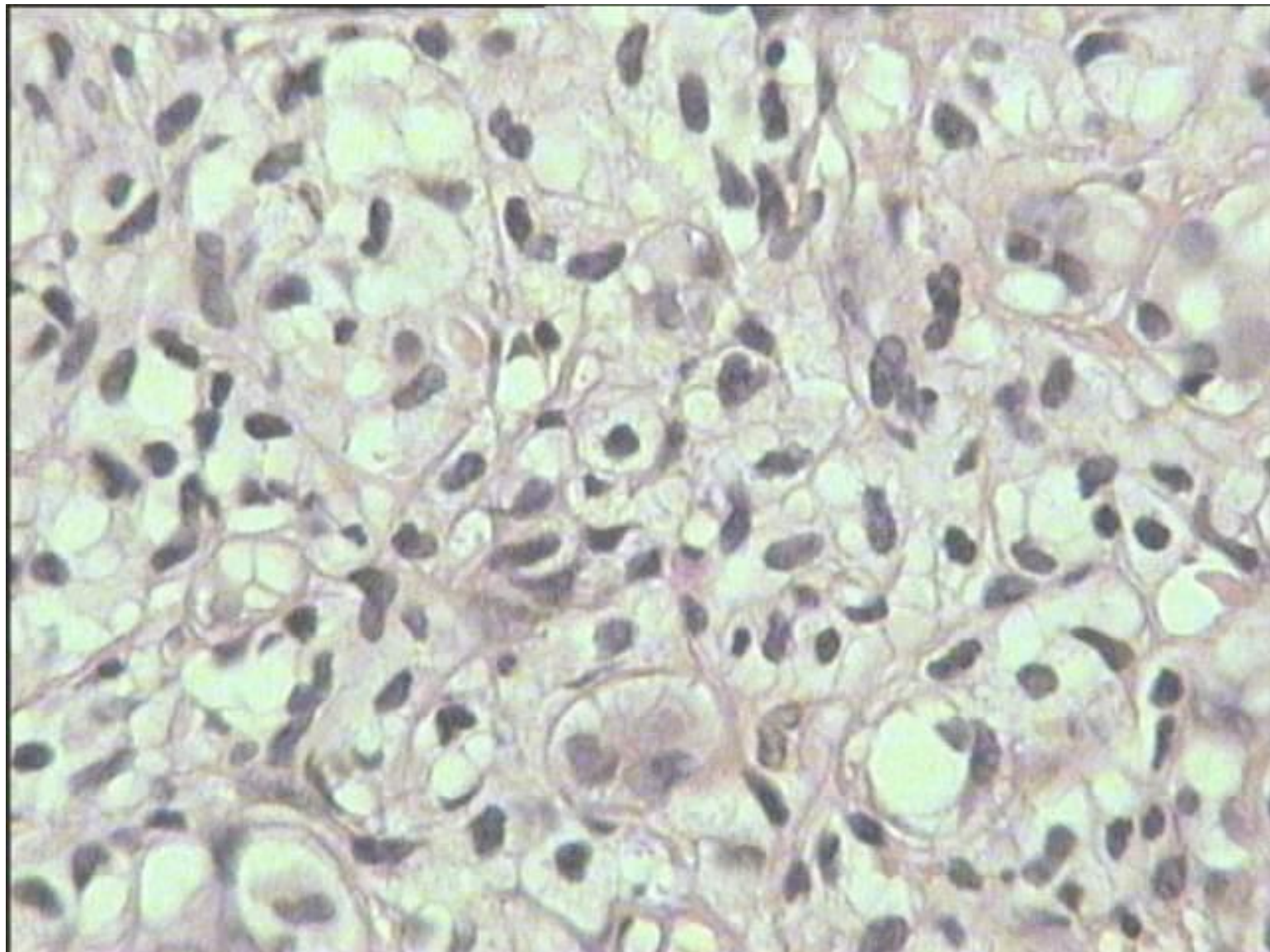
? Lymphoma

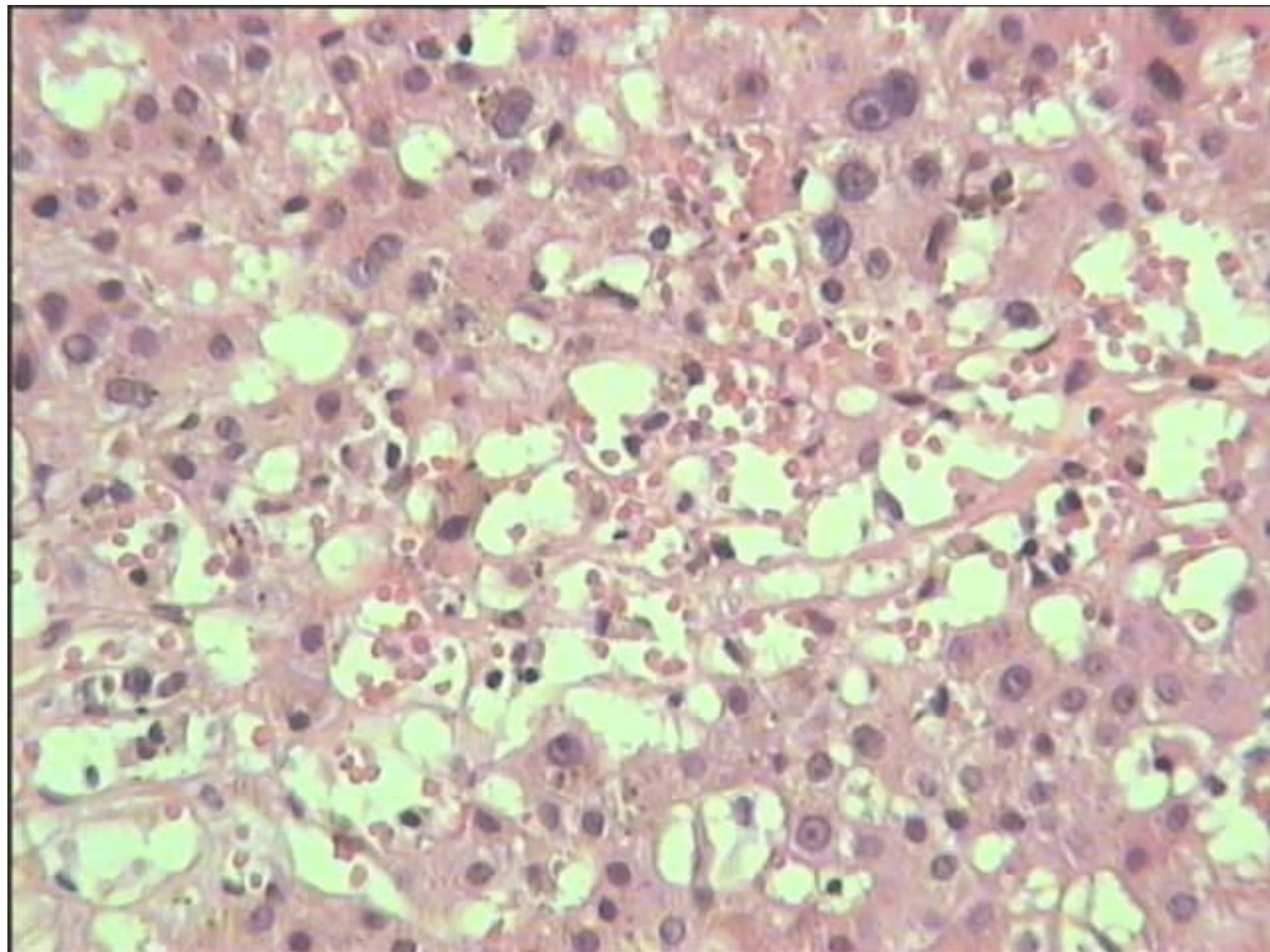
Liver biopsy

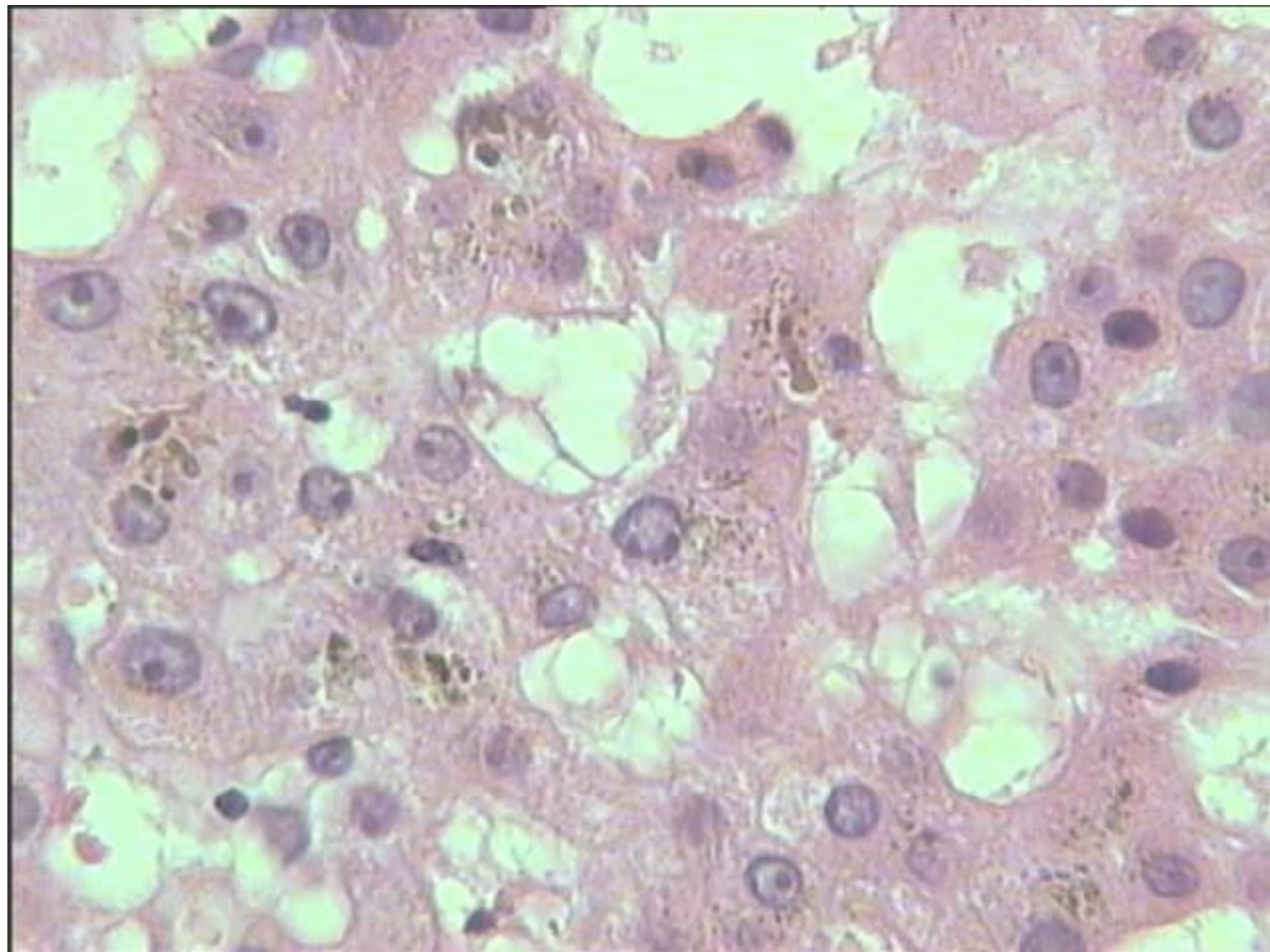


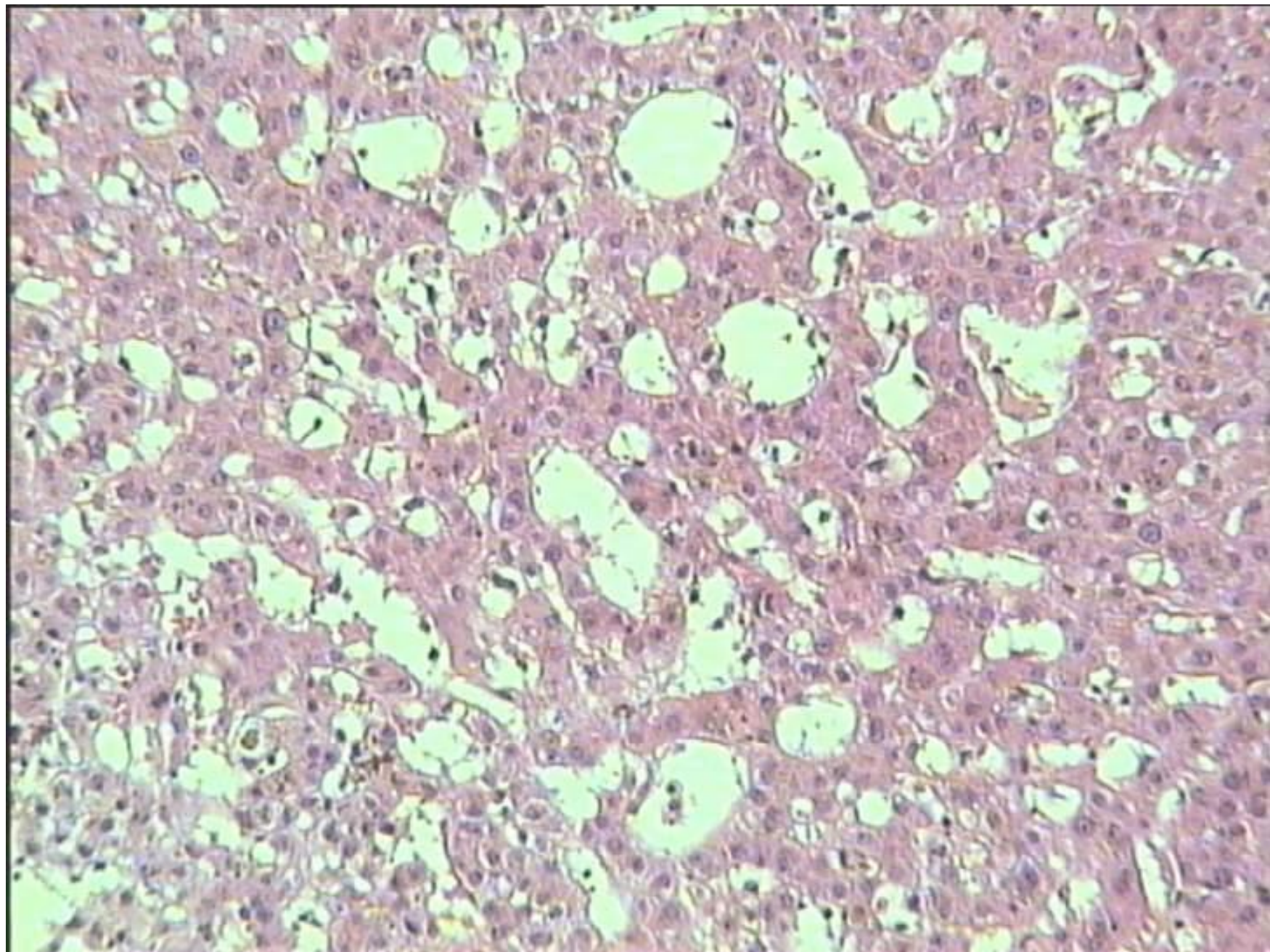












Case 174 - Diagnoses

Lymphoma	30
Biliary disease NOS	69
Cholestasis, probably lymphoma:	139
Lymphoma not excluded	64
LCH	20
Malignant infiltrate	20
Clear cells ?what in portal tracts	50
Chronic hepatitis	1
Metastatic clear cell carcinoma	4
Changes of nearby mass lesion	10
Infection	5
Venous outflow obstruction	4
Drug reaction	2
(lymphoma mentioned somewhere in comments, but not in main diagnosis: 3 people)	

Case 174: comments

Everyone!

Most asked for immunos, more clinical details

‘Educational case – would be clinically irresponsible to report this on one H&E with no clinical information’

People wondered about: HD, T cell lymphoma, mastocytosis, histiocytosis, hairy cell leukaemia, other leukaemia,

Most also commented on features of biliary obstruction

Some also saw features of venous outflow obstruction

Case 174

Follow up: Dr Kennedy

*On sabbatical but report faxed from St
Vincent's*

Clinical details: hairy cell leukaemia. ALD

Case 174 – Discussion

Comment from Dr Roberts –clinical inflammation available at time of reporting original biopsy to be circulated with EQA cases. This case is therefore excluded from scoring. It is nevertheless a valuable educational case.

Overall, suggestion of lymphoma/leukaemia of some sort was raised by 37/44 respondents. A further 6 commented on odd cells without speculating what they were.

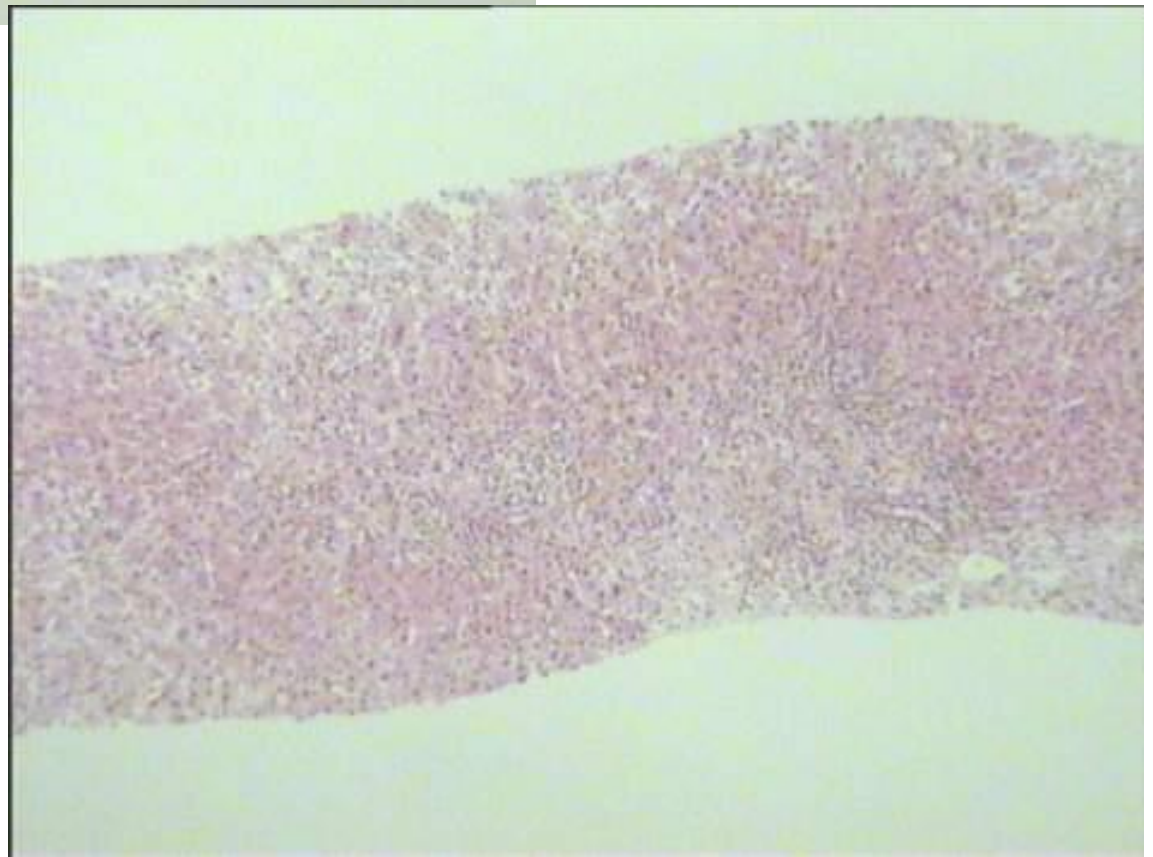
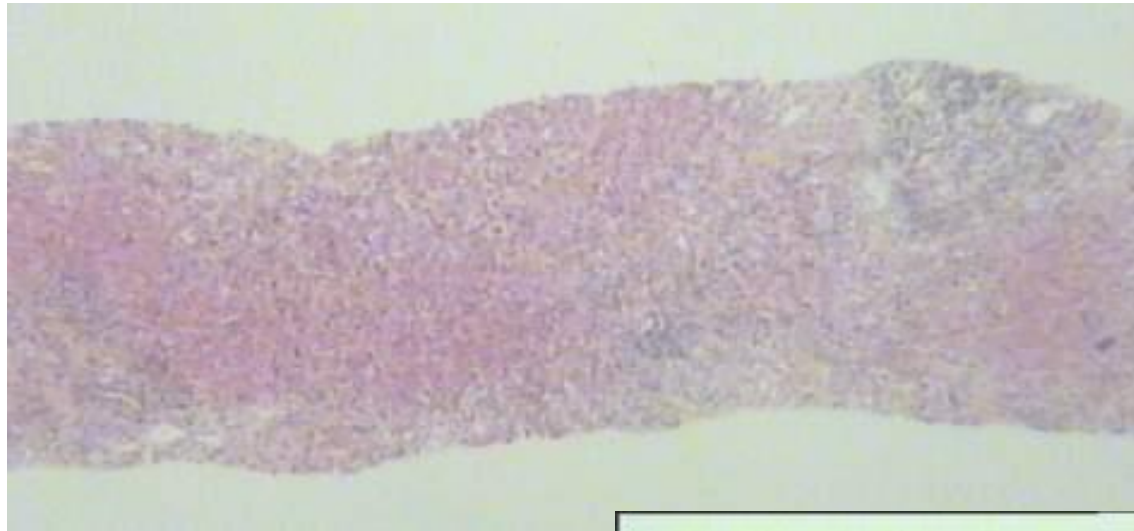
Case 175 History

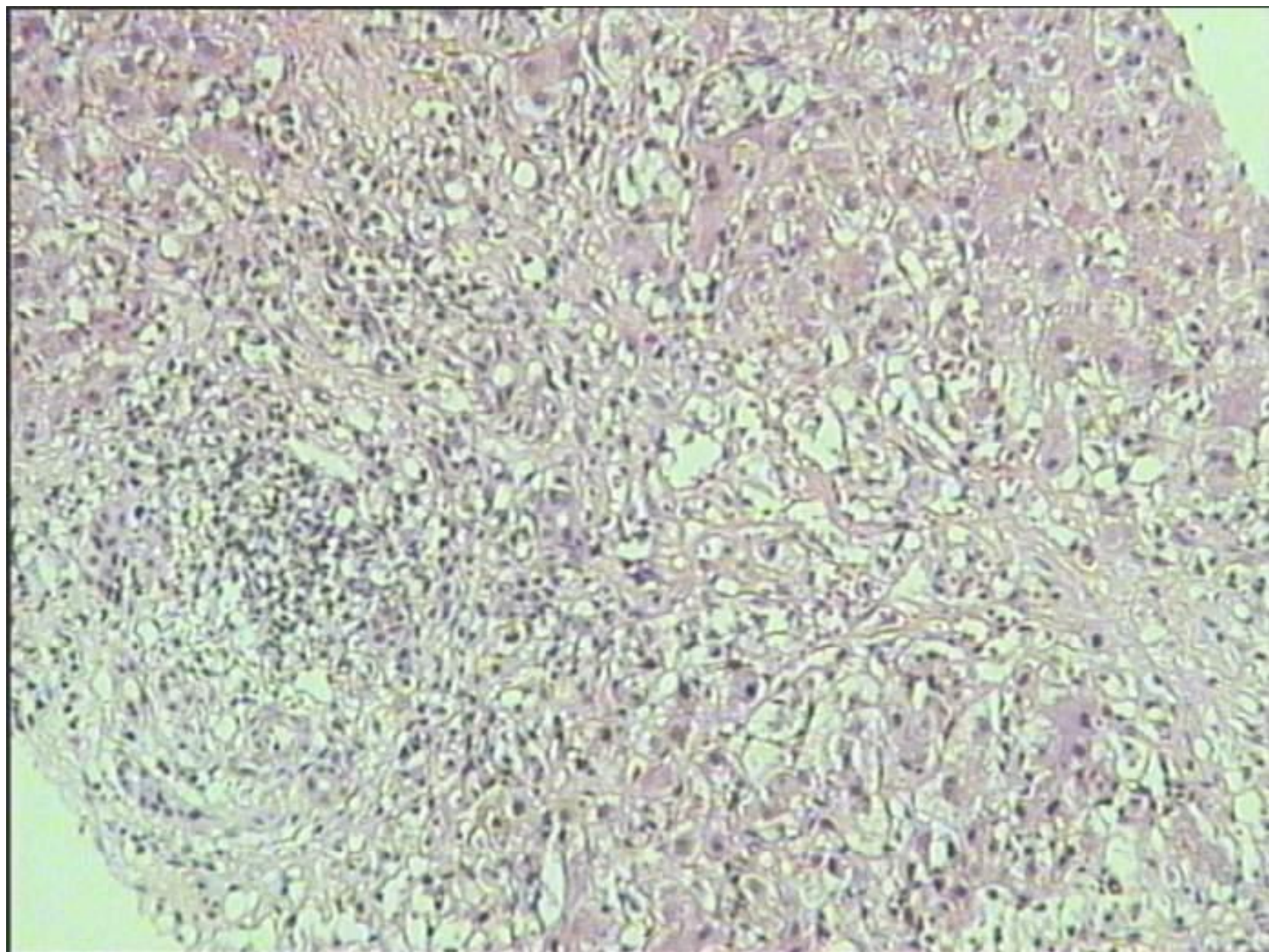
F45. History of acute hepatitis.

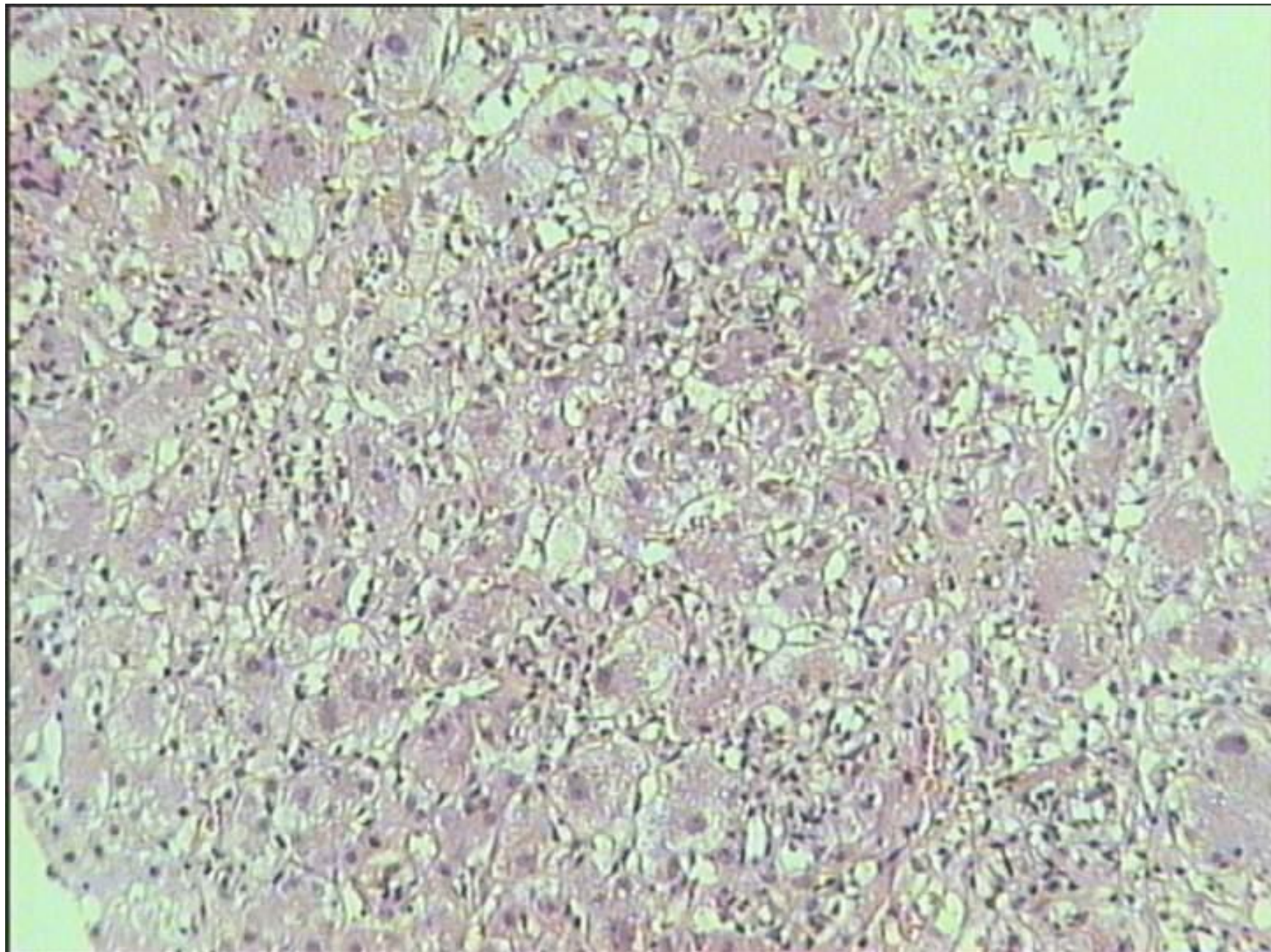
Negative for Hepatitis A, B, and C, on viral screen.

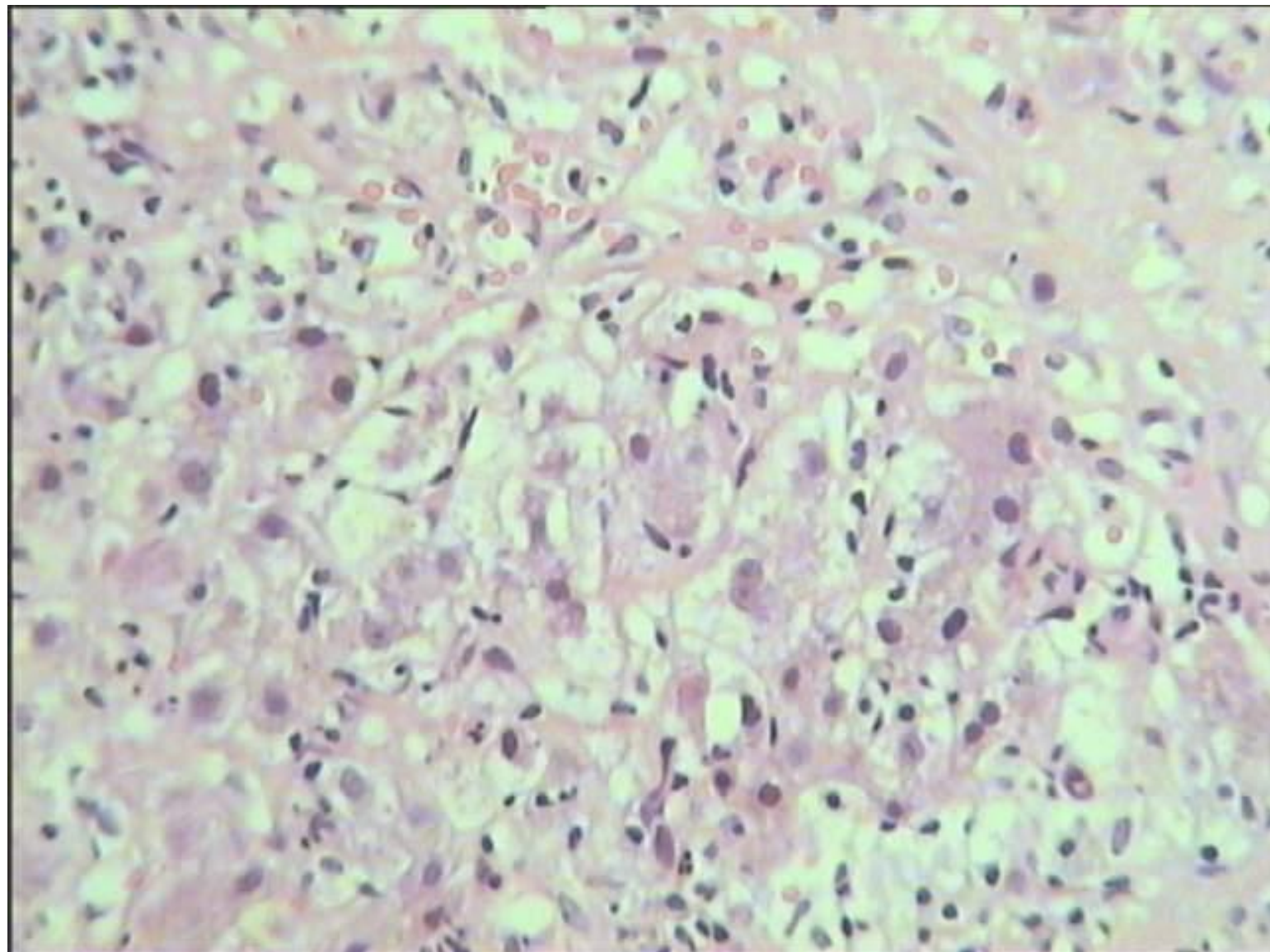
Positive ANA titre 1/6000.

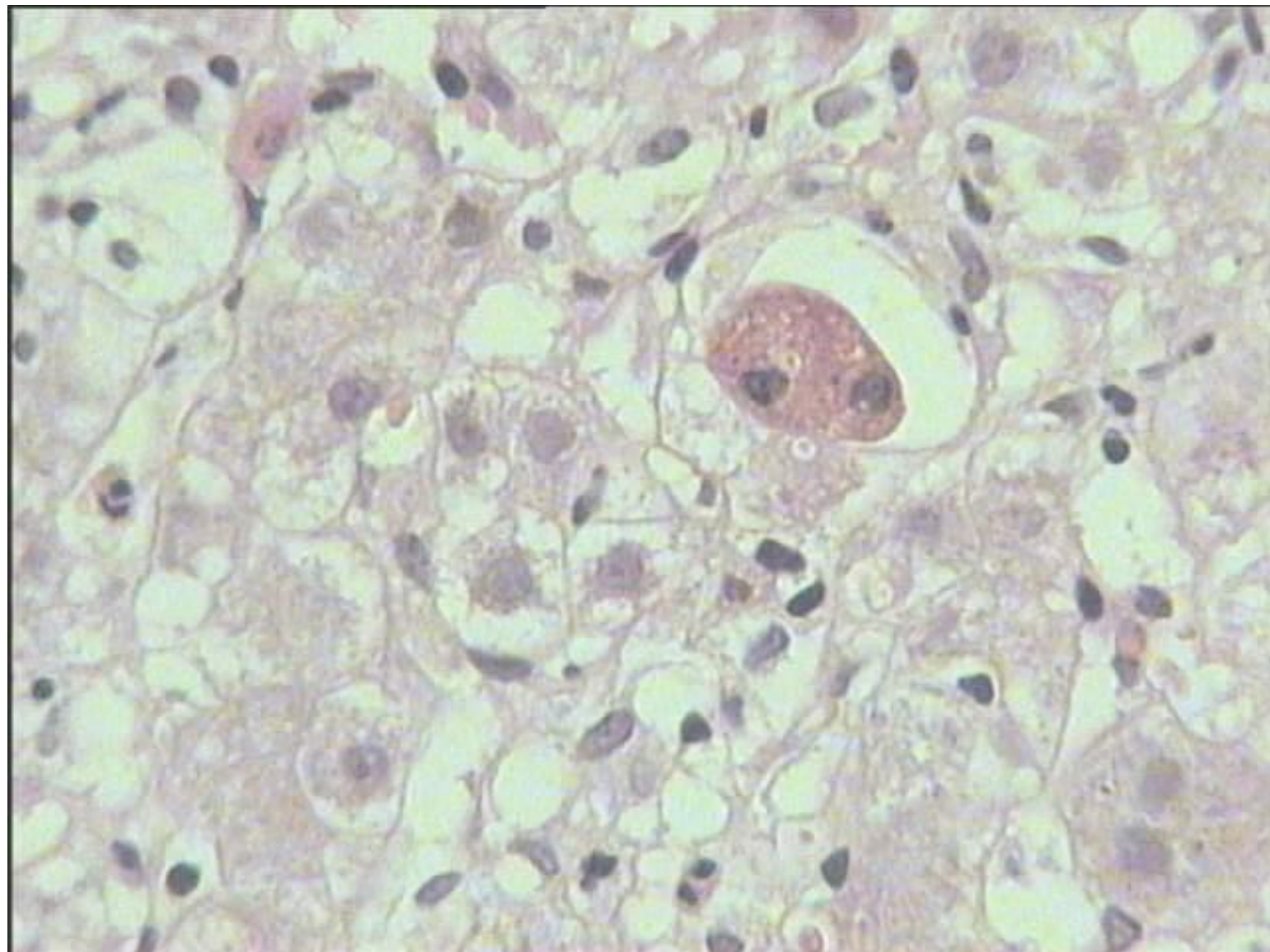
On Viox – Cox2 inhibitor.











Case 175 Diagnoses

Acute hepatitis, attributed to drug, autoimmune not mentioned in main diagnosis:	140	
Autoimmune hepatitis	60	
Acute hepatitis +/- BHN;		
neither or both causes mentioned	180	
Acute on chronic autoimmune	20	
CMV hepatitis		10
No section	20	

Case 175, comments:

Several: ?acute presentation of autoimmune, need more information on autoantibodies

Viral/CMV inclusions 2

Don't think drugs cause giant cells 2

Focal haematopoiesis 2

Follow up: Dr Kennedy: *reported as: acute severe hepatitis on a background of fibrotic change (stage 3/6). The aetiology is in keeping with autoimmune type*

- Case 175, Discussion
Accept all responses except CMV hepatitis.

See discussion of 176

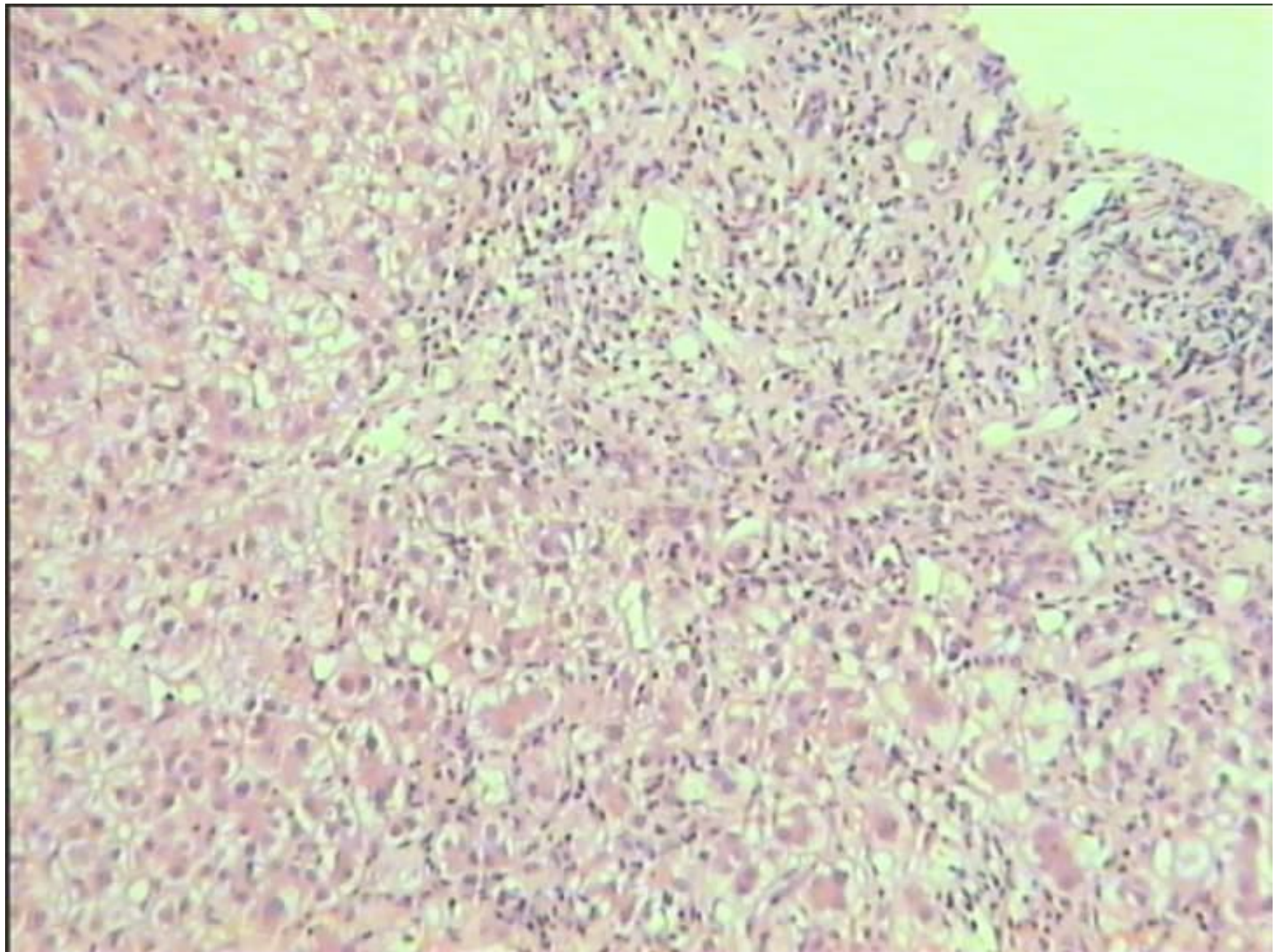
Case 176 History

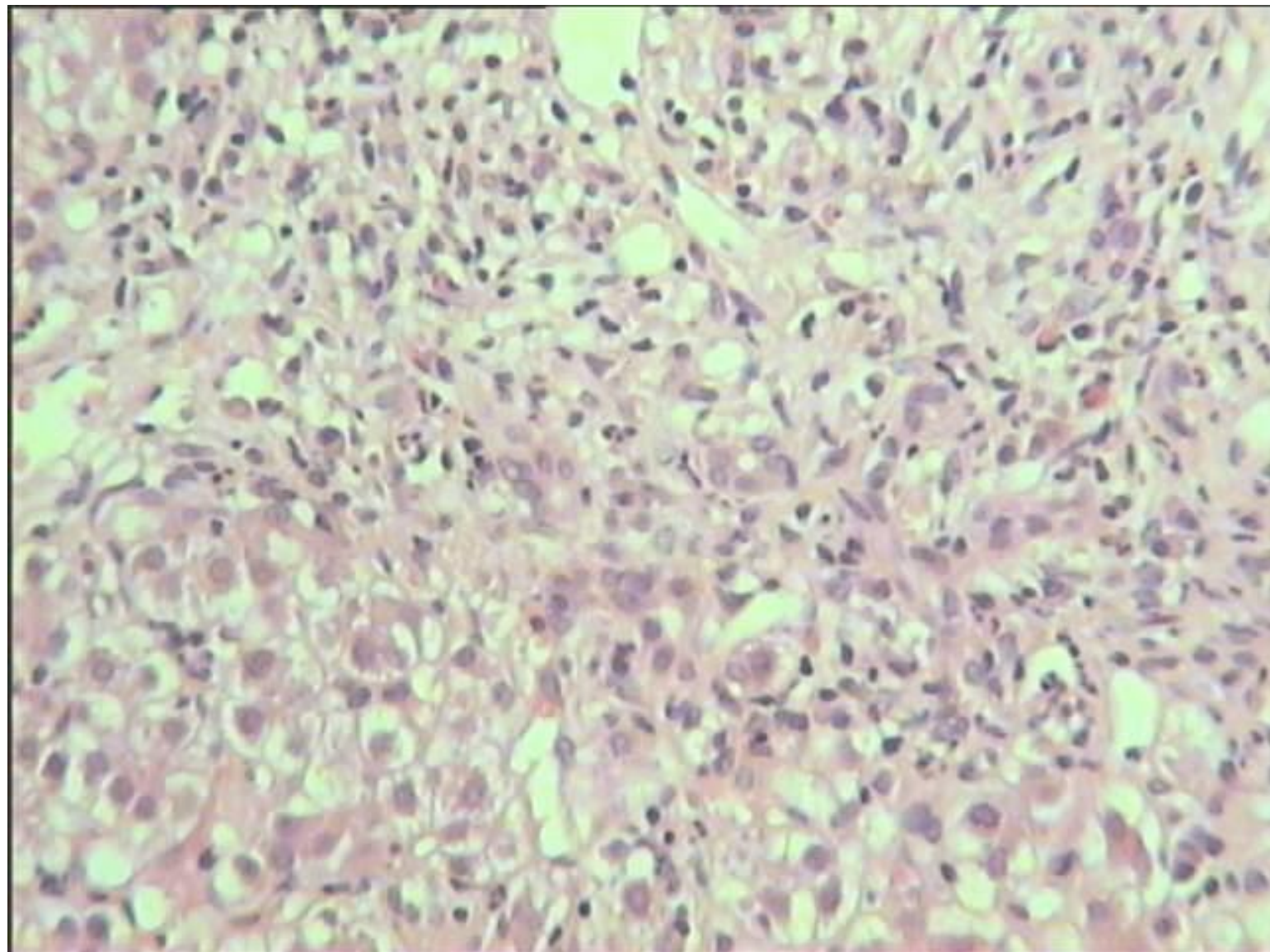
F44. Transaminitis, ALT>650, alk phos 188, positive SMA.
? AIH.

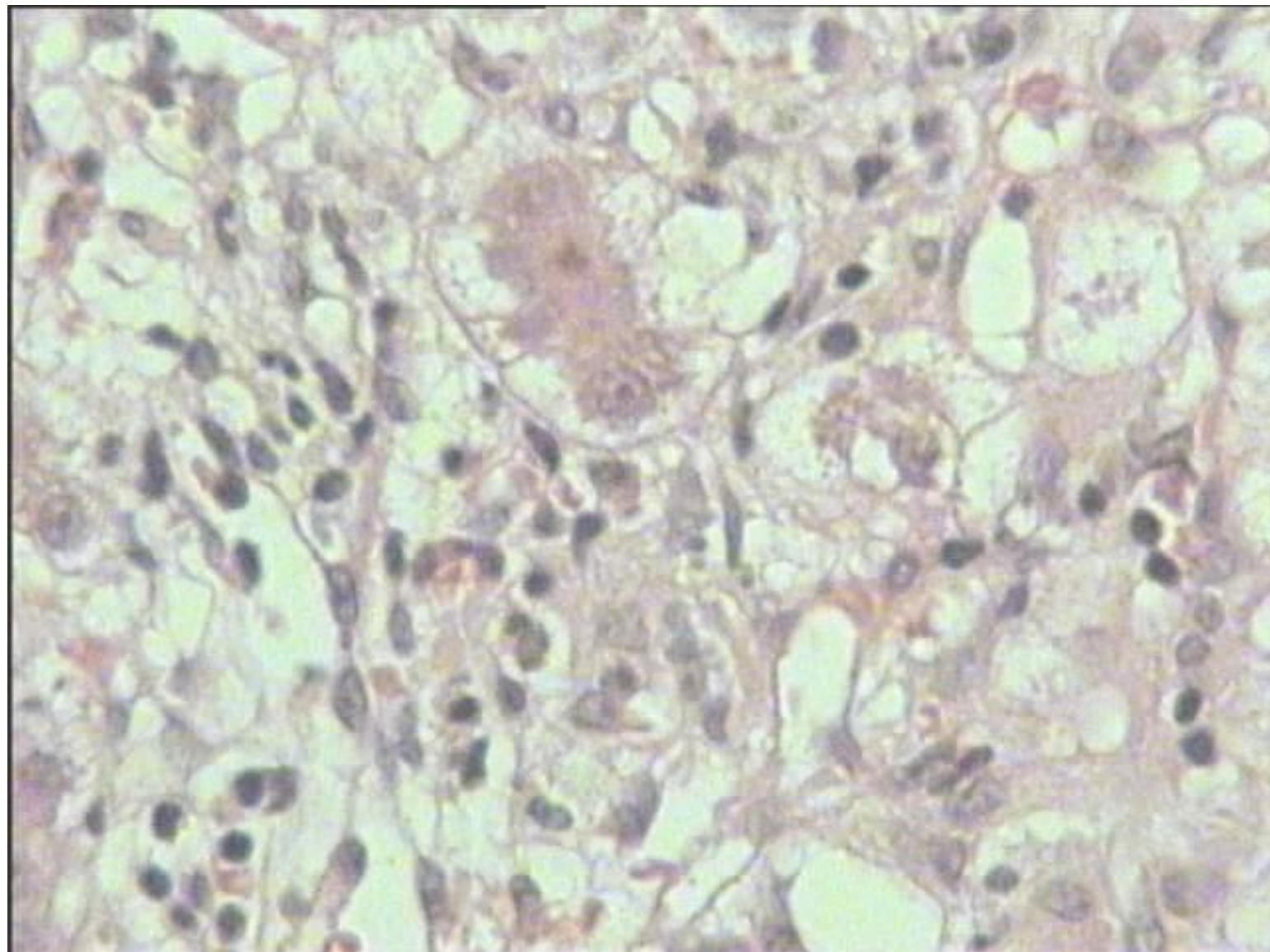
Further details: history of hypothyroidism – on thyroxine replacement therapy. Rh factor +ve, EBV +ve (Report: evidence of recurrent EBV infection).

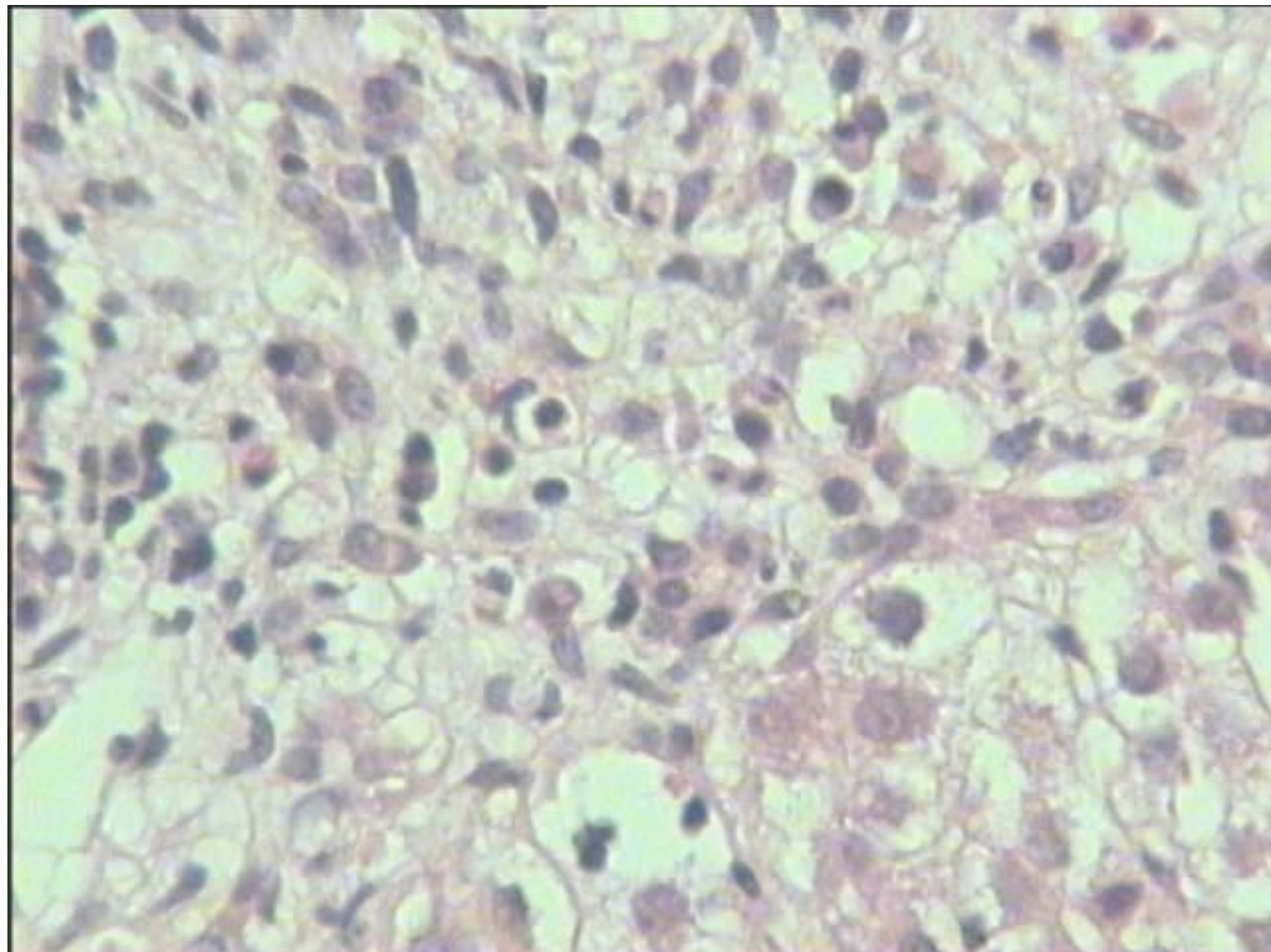
History of blood transfusion 4 years ago (hysterectomy for fibroid).

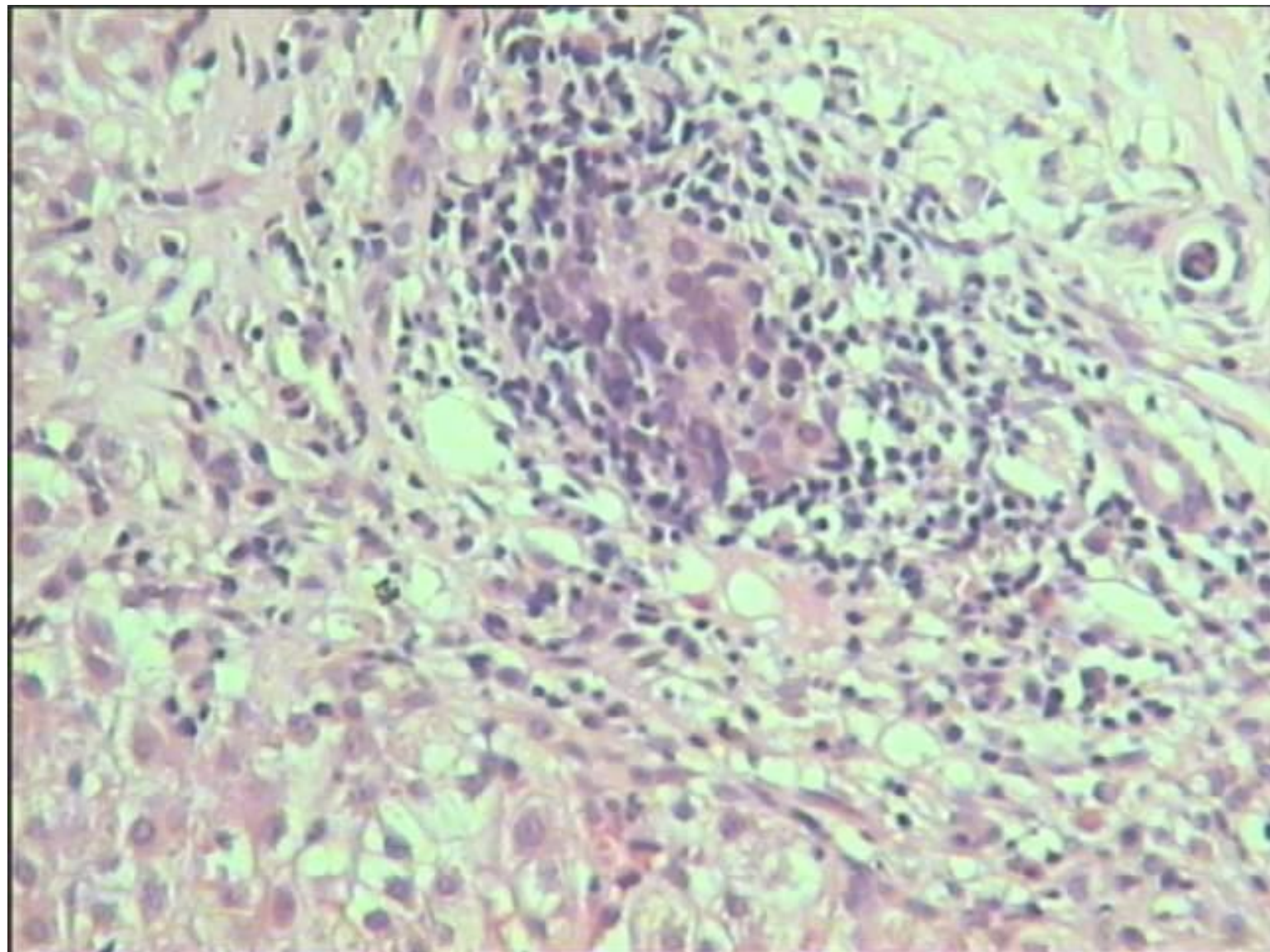
Recent history of treatment with amoxicillin and ciprofloxacin for ? UTI











Case 176 Diagnoses

Acute hepatitis, ? or probably drug, autoimmune not mentioned in main diagnosis	157
Autoimmune hepatitis	79
Hepatitis, neither or both causes mentioned in main diagnosis:	138
Chronic active hepatitis in keeping with drugs	30
Chronic autoimmune	20
Hepatitis, probably acute, ?drug or hepatitis C	10
EBV	4
?biliary disease	2

Case 176 comments

Eosinophils: several

Viral hepatitis needs exclusion by serology: several
?variant syndrome of AIH/PBC

LBDO like or cholangiolitis element: 5 people

Follow up: *Dr Guha, at meeting: clinical diagnosis was AIH, treated with steroids Azathioprine improved. Liver function test normalized, still taking low dose steroids.*

Case 176 Discussion

All diagnoses accepted.

Comment is that even this does not confirm the diagnosis of autoimmune hepatitis, since drug hepatitis would also have resolved with steroids.

Considerable debate over role of histopathology in acute hepatitis, and what constitutes acute hepatitis

Summary of discussion

- Role of histology is to exclude chronicity and comment of severity of acute hepatitis.

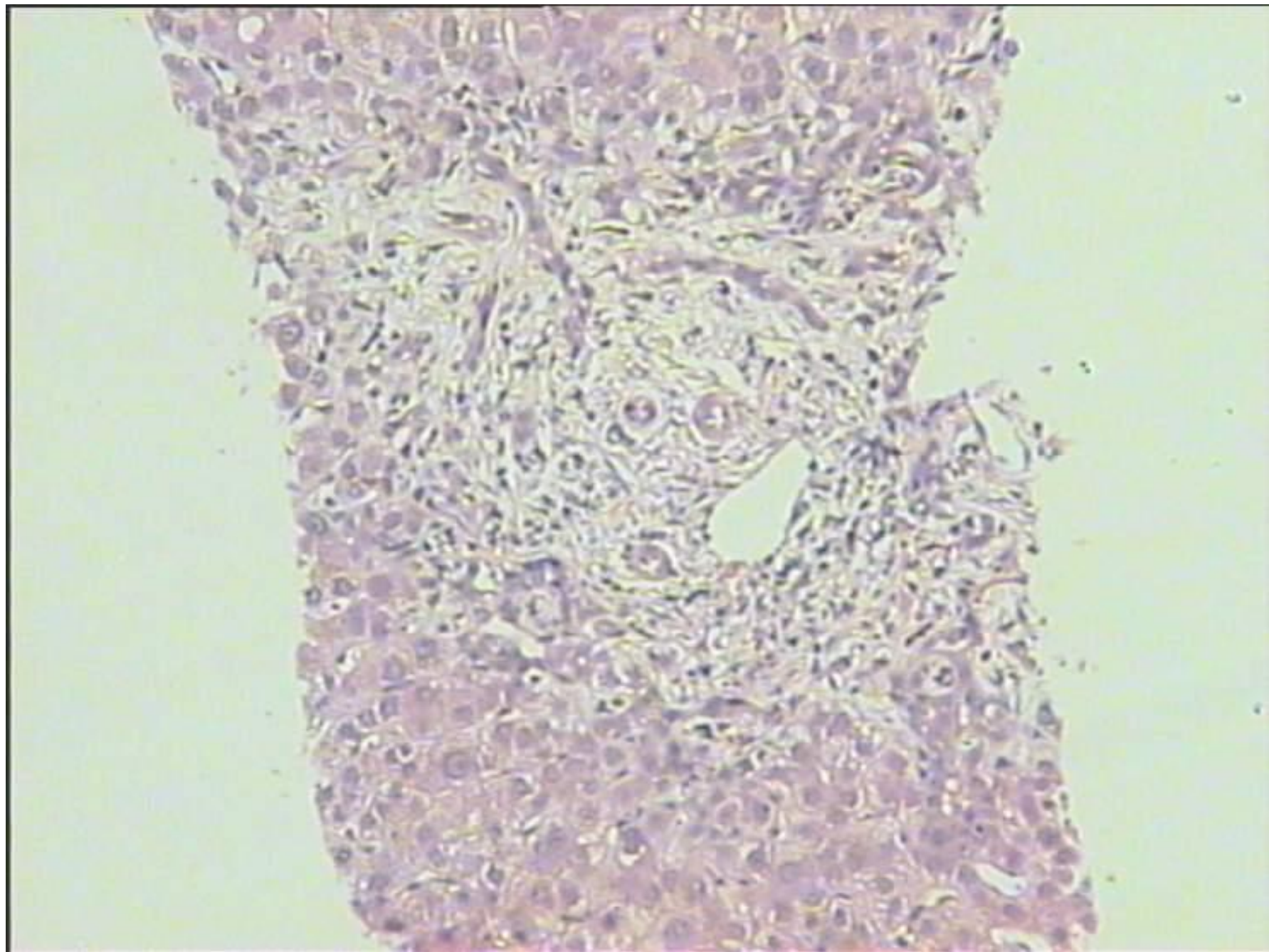
In chronic hepatitis, plasma cells, interface hepatitis and rosetting are characteristics favouring autoimmune aetiology, while in acute hepatitis, histological features do not help in determining the aetiology. In acute liver damage, there may be transient liver autoantibodies; therefore raised IgG and smooth muscle autoantibodies high titer of liver autoantibodies are required to accept autoimmune hepatitis as the cause.

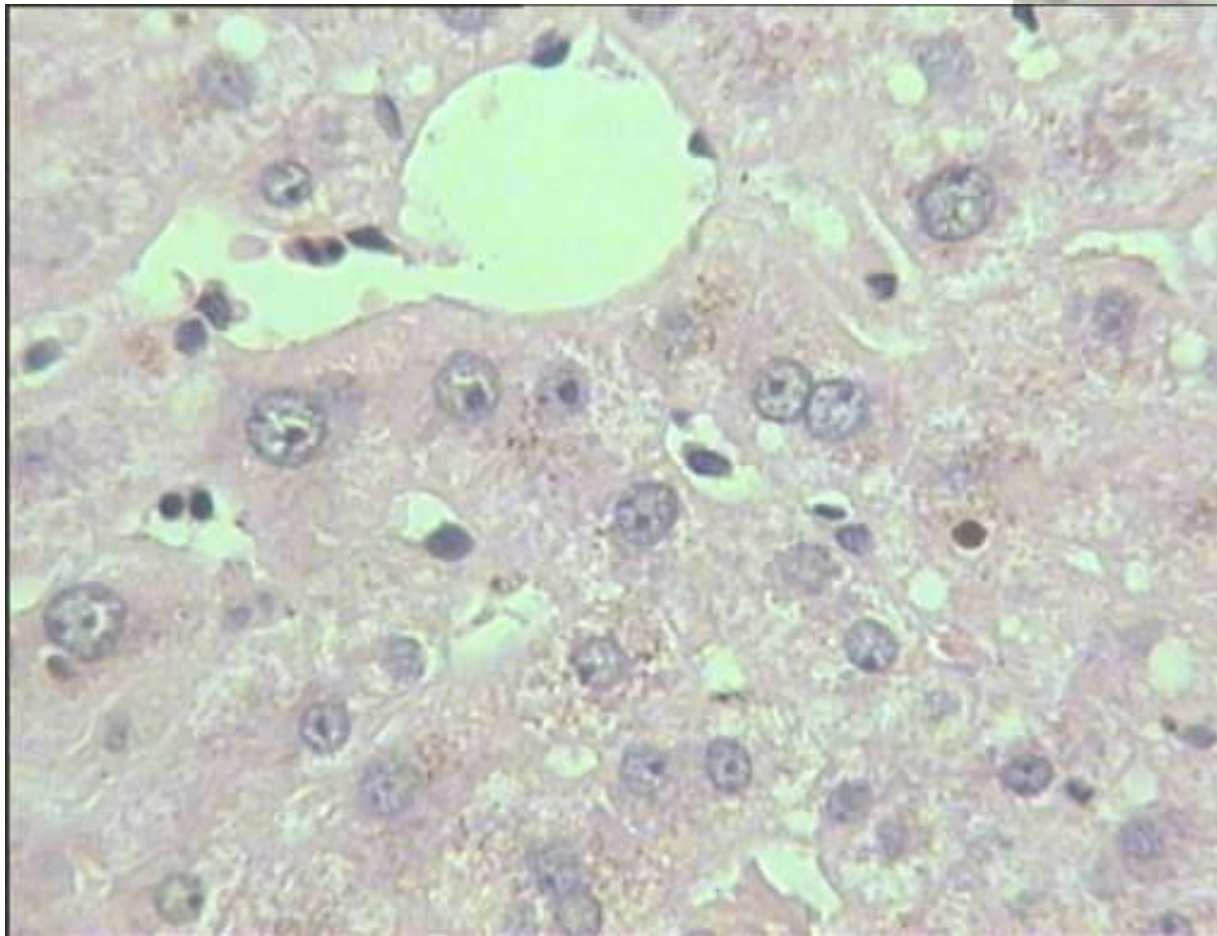
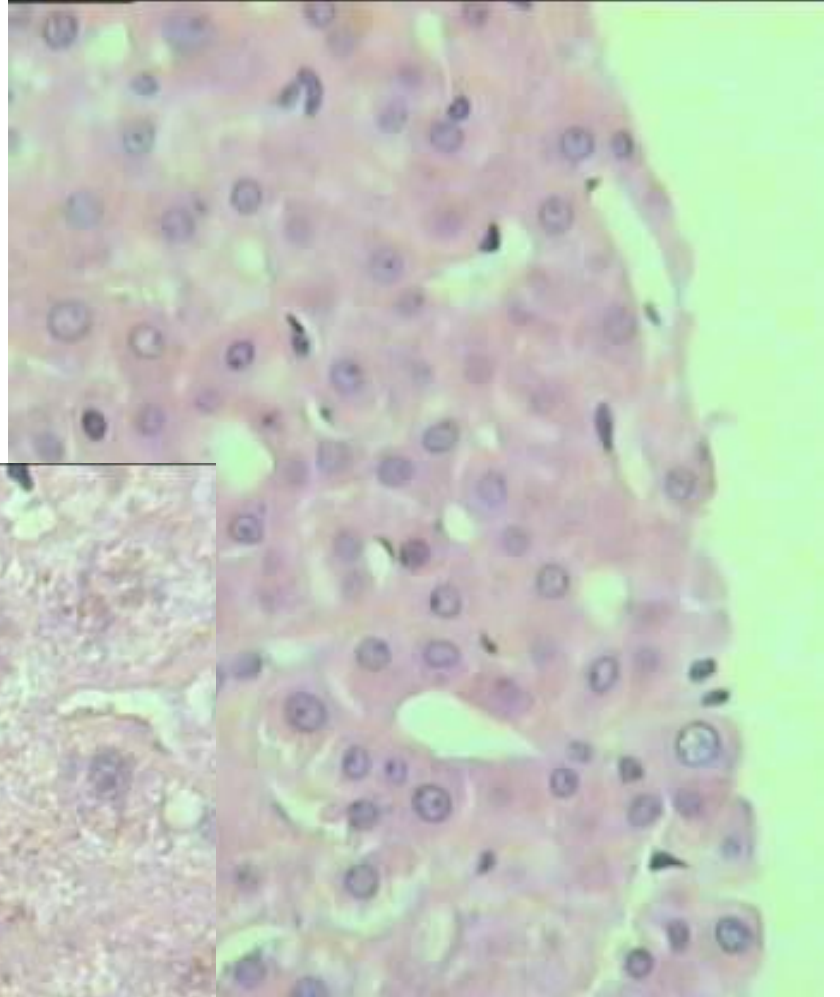
Discussion on terminology of acute-v-chronic hepatitis.

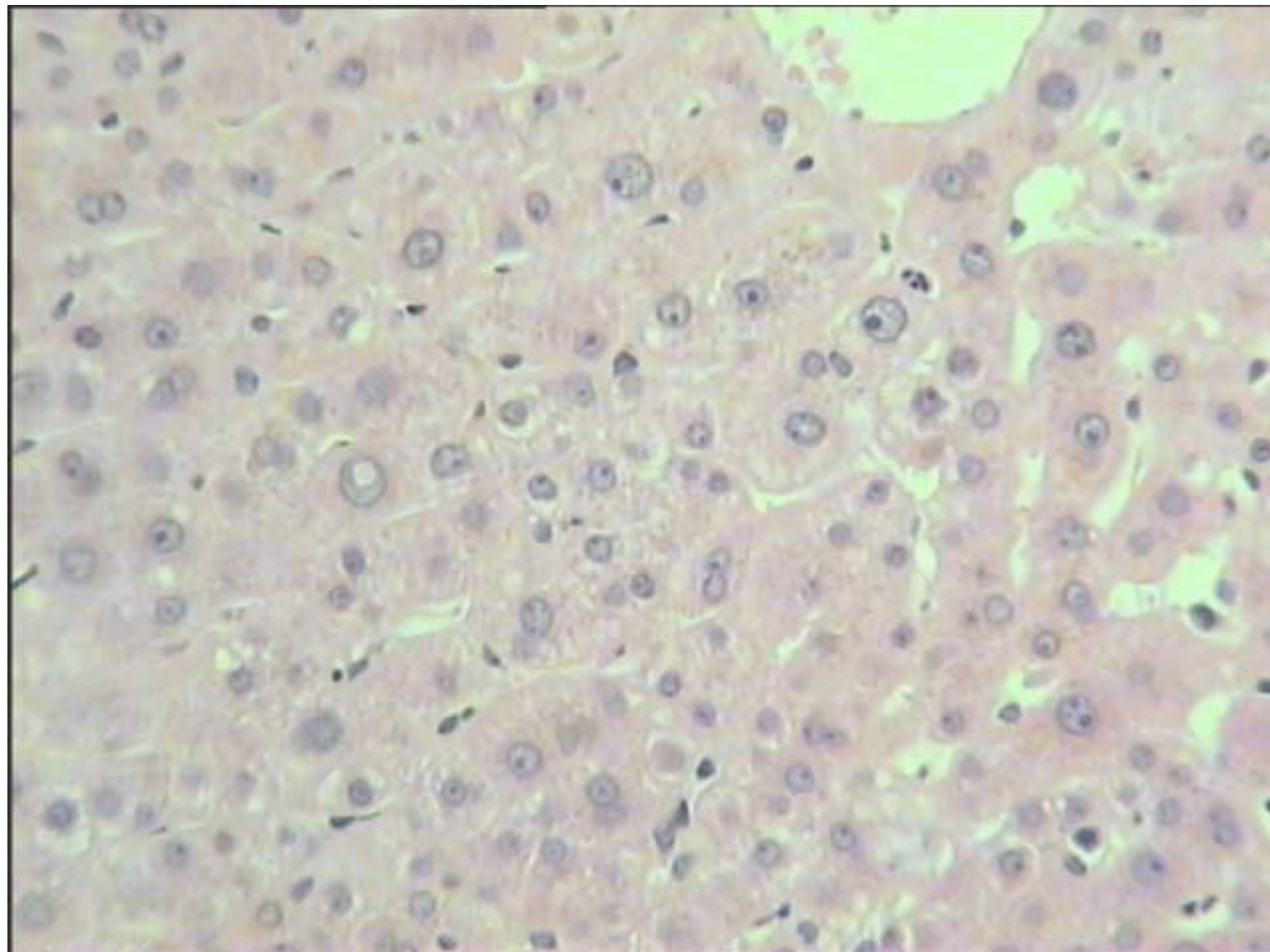
To diagnose chronic hepatitis needs clinical history duration >6 months or presence of elastic fibres in septa. In absence of evidence of chronicity, it is not possible to determine duration of hepatitis on histology. The diagnosis autoimmune hepatitis is usually made without indication of acute or chronic, since it is accepted that this is always a chronic disease.

Case 177 History

F 50. Cholestatic jaundice on atorvastatin .
Also nephrotic







Case 177 Diagnoses

Cholestasis associated with drug:	128	
Hepatitis – drug related:	33	
Biliary obstruction	116	
Portal reaction consistent with drug but exclude duct obstruction	40	
Chronic obstructive Biliary disease	20	
Biliary disease – drugs or obstruction		45
?chronic hepatitis+drug induced Cholestasis		10

Case 177 contd.

Cirrhosis ?cause 5

Sepsis 12

Ductopaenia and cholangiolitis, ?PBC 10

Ductopaenia and cholangiolitis ?drugs/PBC 10

cholangiolitis and paucity of ducts ? drugs 10

Difficult – no answer 10

Case 177 comments:

Several: Biliary features

?does atorvastatin cause LBDO like changes

several: ?ductopaenia

Few – advise imaging, looks like ?PSC/PBC

Follow up: *Dr Ansell: – no duct obstruction found but still had high alkaline phosphatase 9 months later. Nephrotic syndrome reduced to minimal change nephropathy. Investigation of biliary tree shows no obstruction*

Case 177 Discussion

- ?role of statin in cholestatic liver disease.
- The statins recognised to cause hepatitis, although low risk, not associated with cholestatic injury. This biopsy shows features suggestive of biliary disease; clinicians know the patient is on statin.
- Response to this biopsy should be to recommend investigation to exclude large duct obstruction or chronic biliary disease.

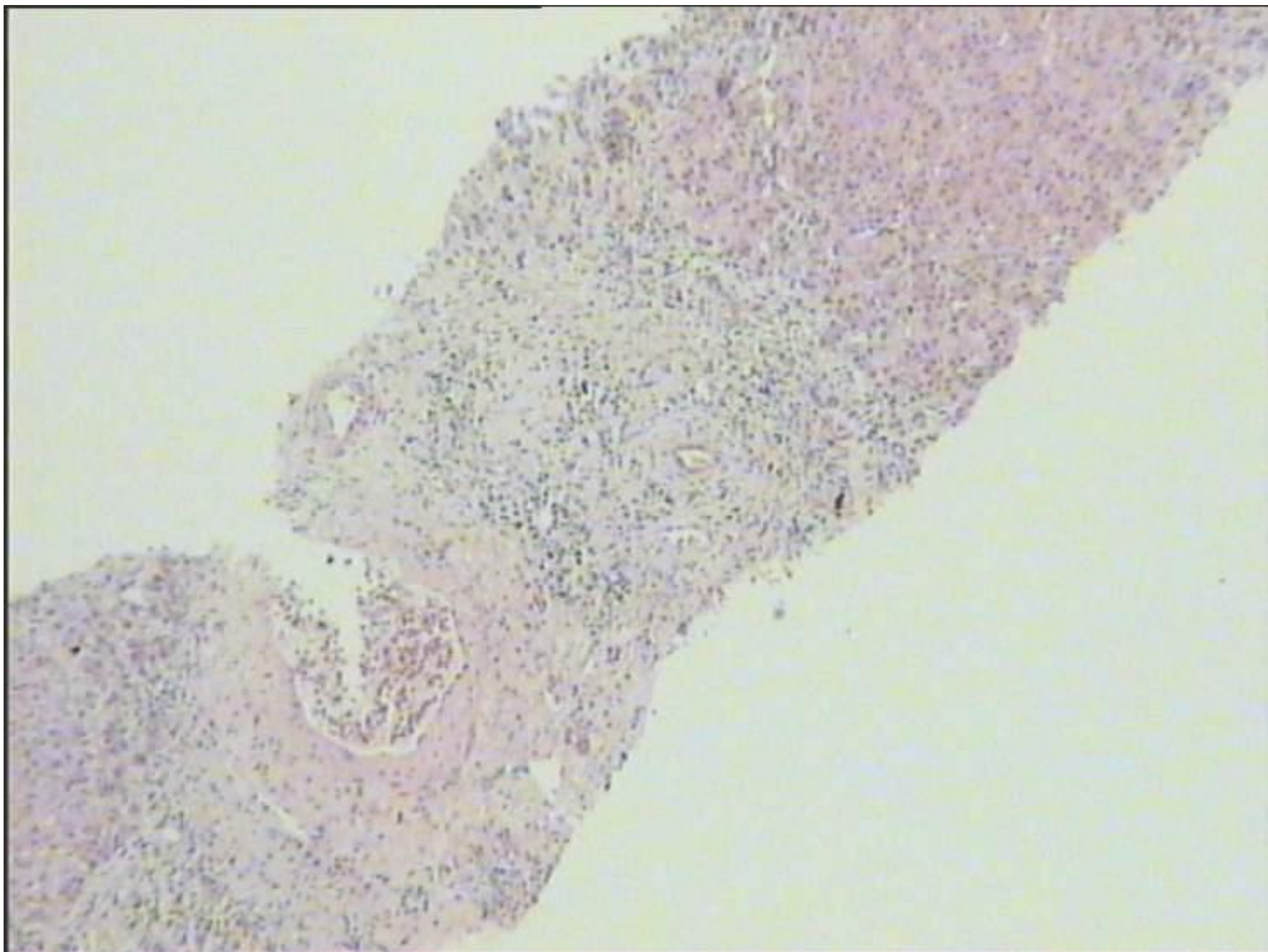
- Accepted diagnoses are any that mention need for investigation of biliary tree; attributing these features to the drug without raising the possibility of duct obstruction or some form of (non-drug related) chronic biliary disease is not an accepted diagnosis.

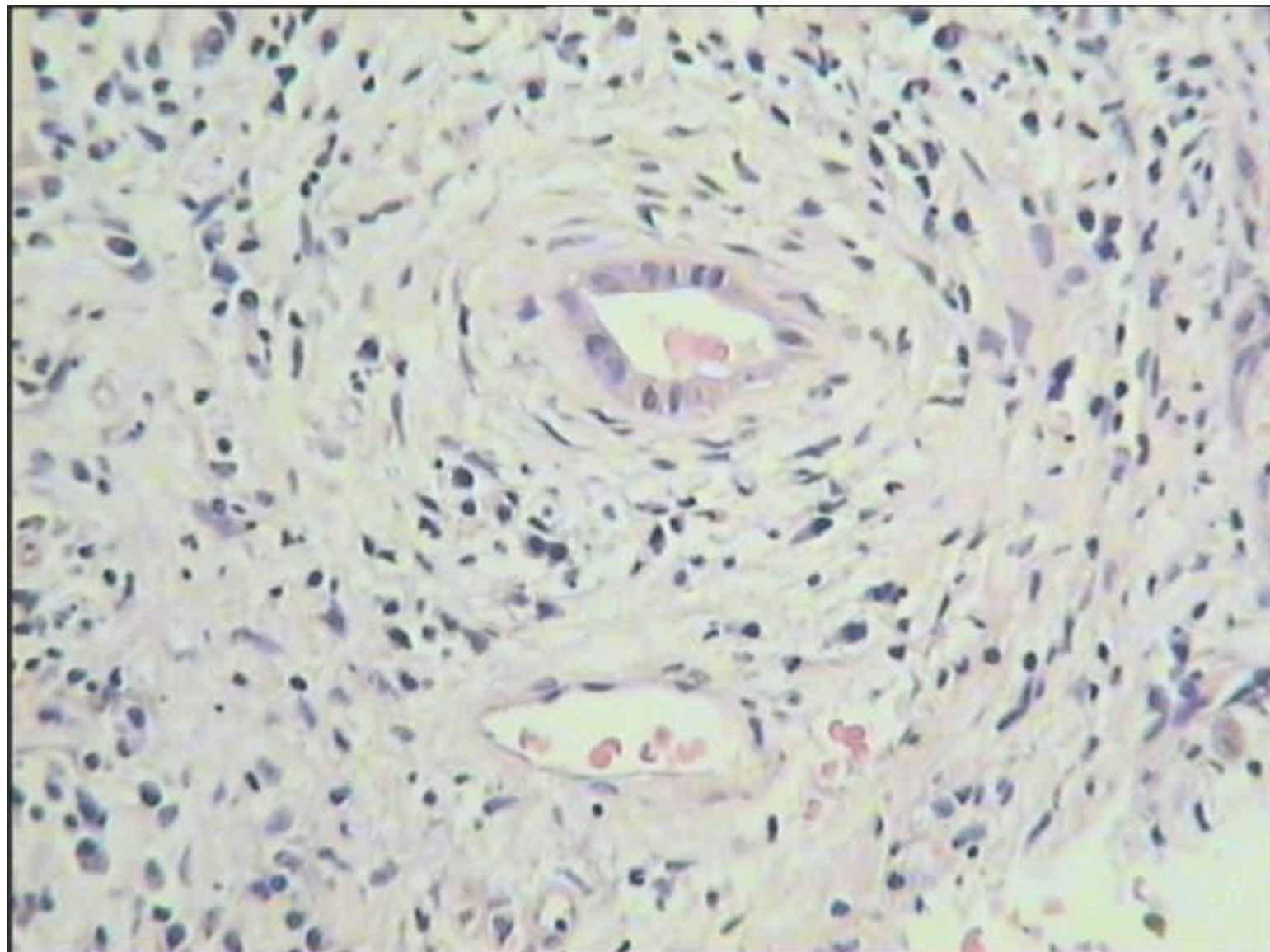
Case 178 History

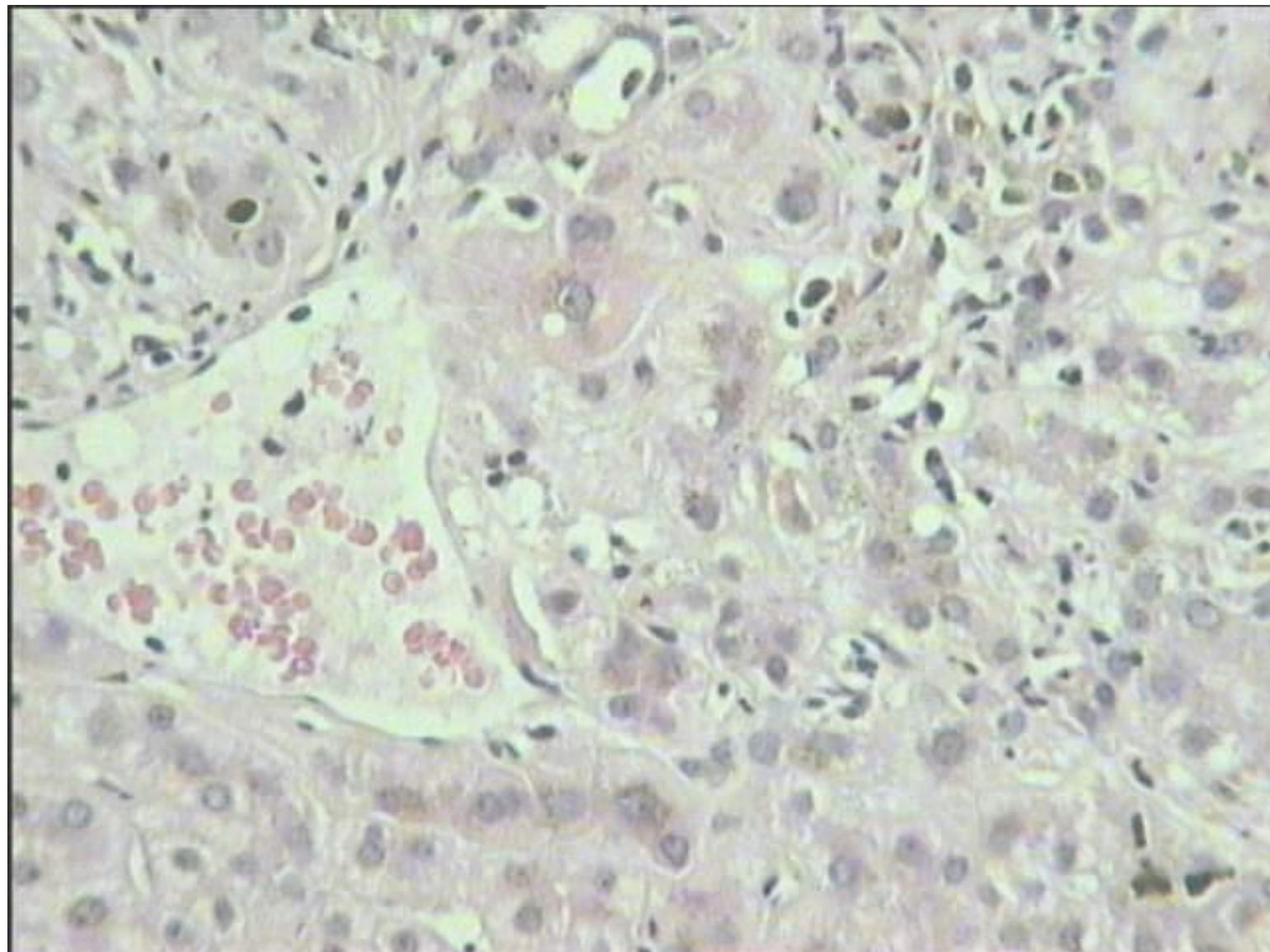
Male 61.

Known UC for 2 years

Recent episode of jaundice







Case 178 Diagnoses

PSC	340
? PSC mentioned in main diagnosis 60	
Cholestasis – PSC mentioned in secondary diagnosis 20	
Cholestatic hepatitis, ? drug.	
No mention of PSC anywhere 20	

Case 178 comments

Several: needs imaging for PSC

In view of severe cholestasis, ? dominant stricture,
exclude malignancy,

? sepsis

Follow up: Dr Ansell : *much copper associated protein.*

ERCP failed. Diagnosis of PSC accepted on this biopsy and clinical data.

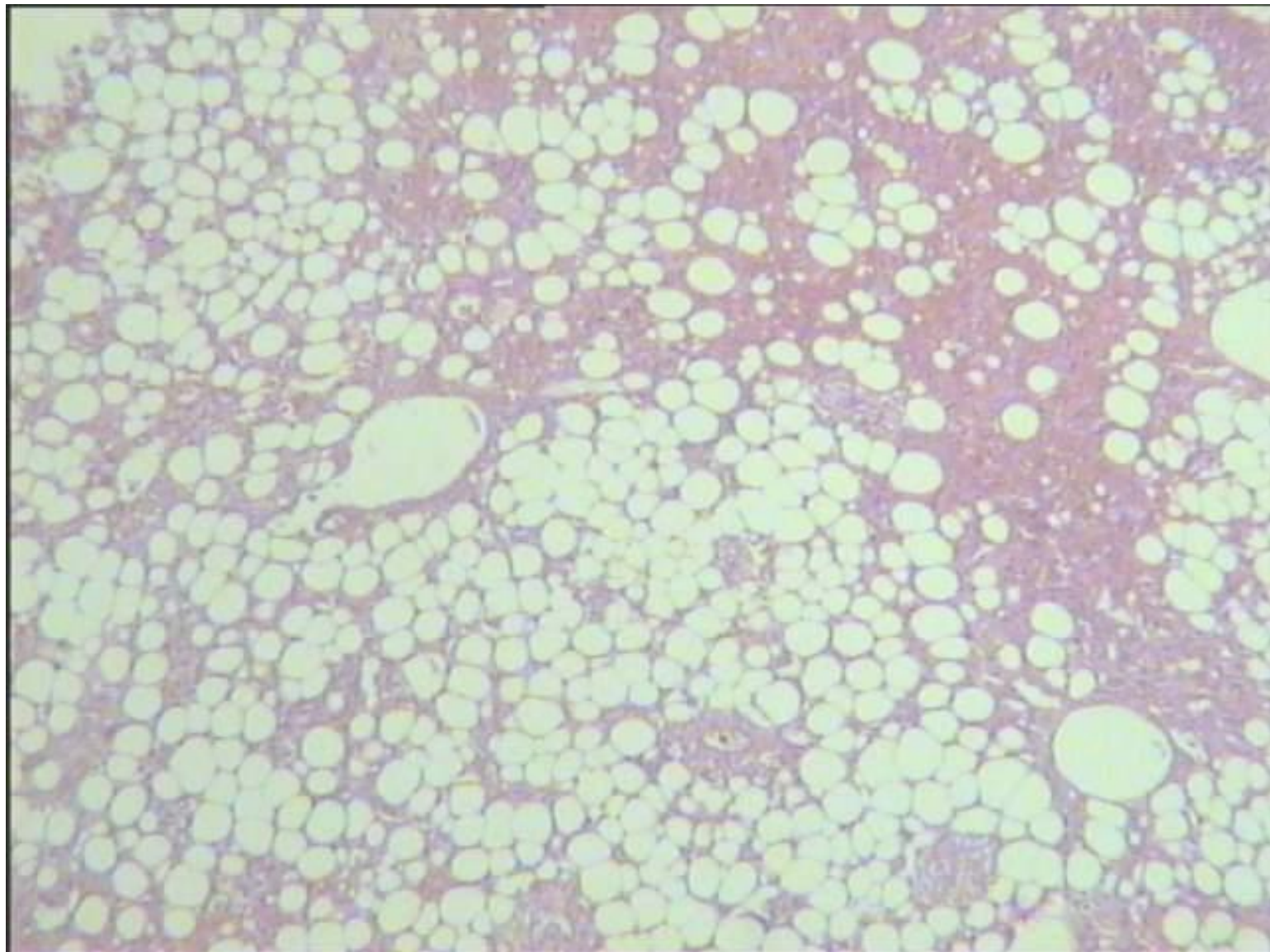
- Case 178 discussion

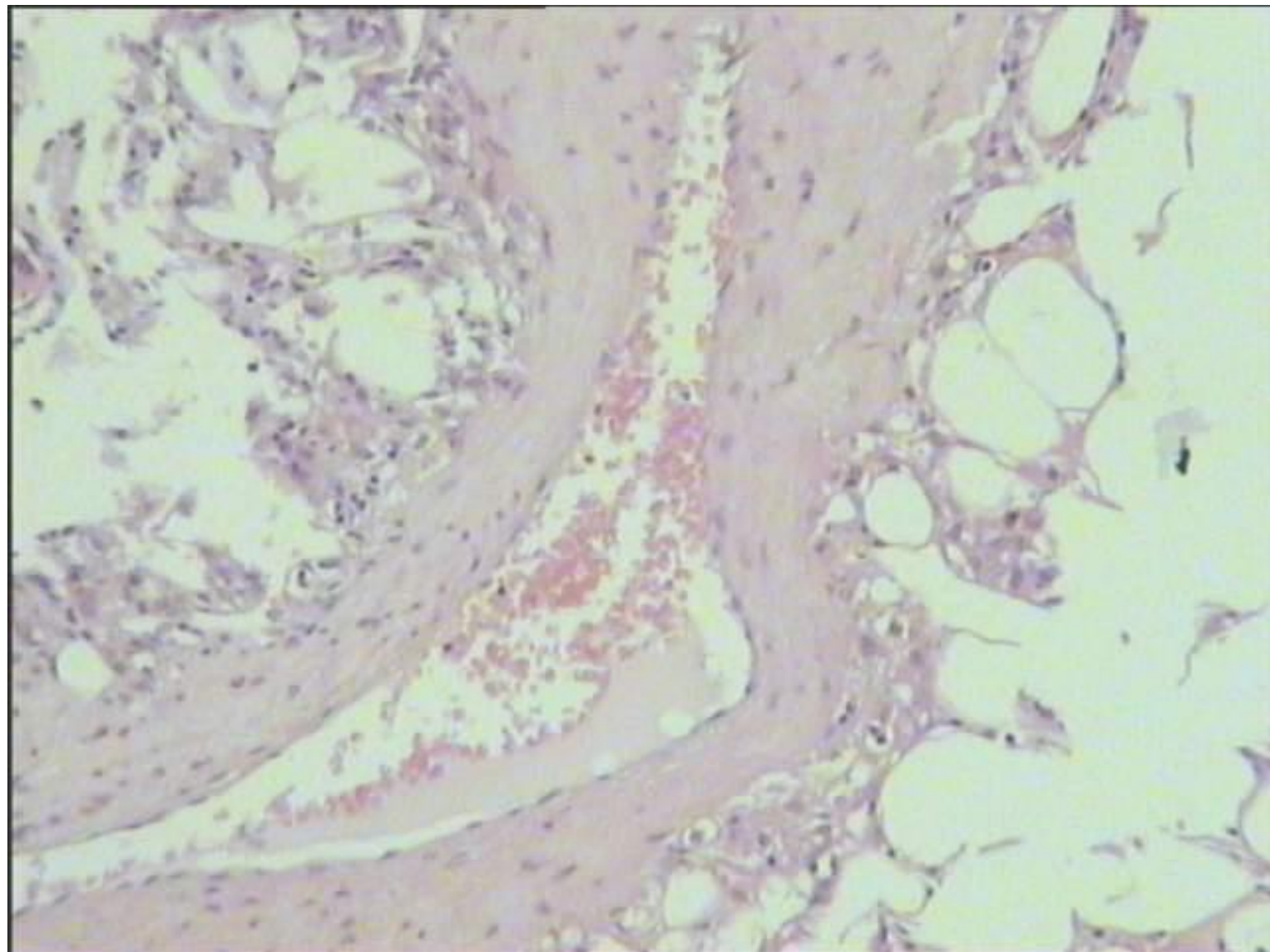
Accepted diagnoses equals = any that mention PSC somewhere.

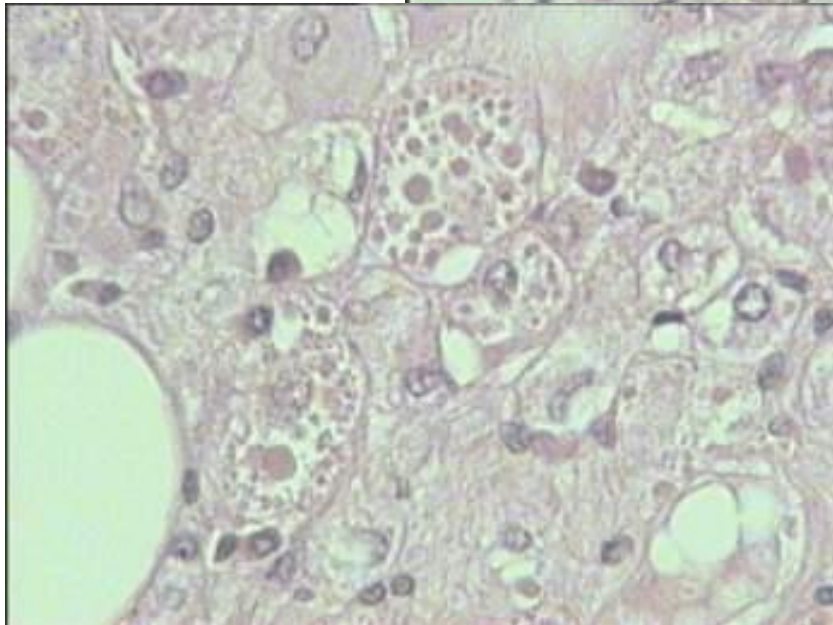
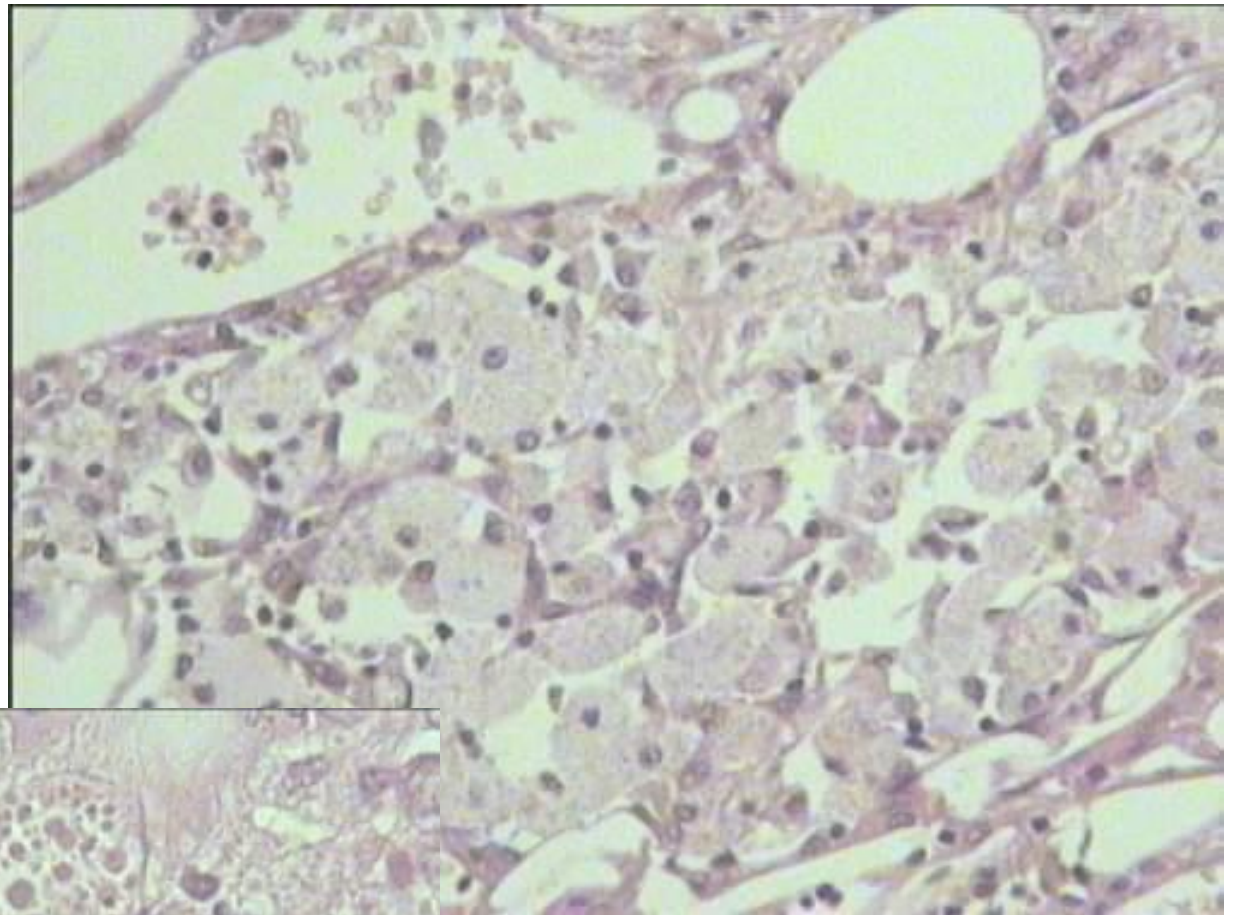
Case 179 History

F 48. Large tumour in liver.

Immuno: HMB45 positive.







Case 179 Diagnoses and comments

Angiomyolipoma

440

Comments:

association with renal AMLs,

tuberous sclerosis in 5-10%

Lipomatous type: 2 people

- Case 179 Discussion
Full consensus.
Accept all diagnoses

Case 180 History

Female aged 56.

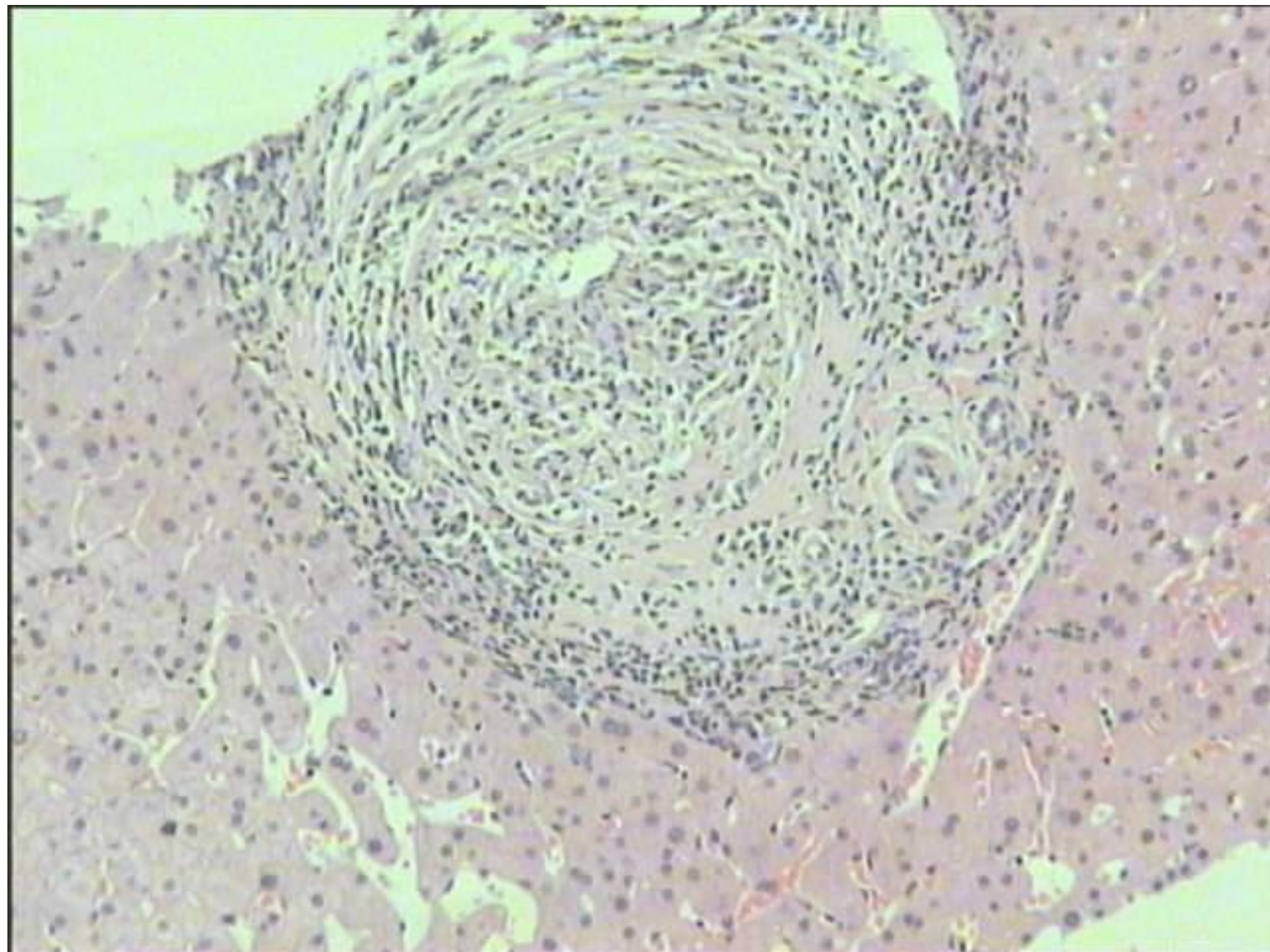
Generally unwell.

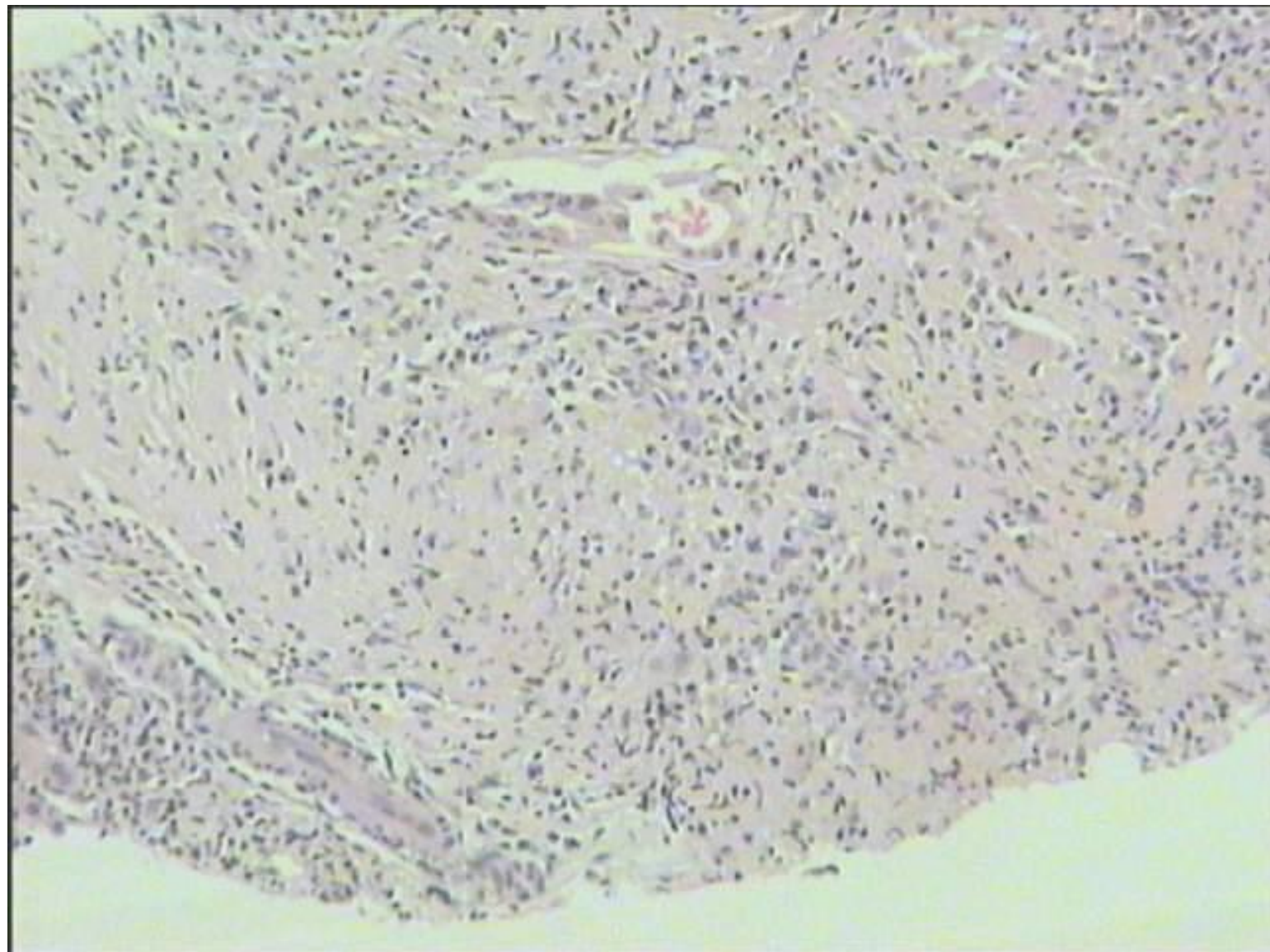
Abnormal LFT's. Raised Alk Phos, Gamma GT, and
AAT

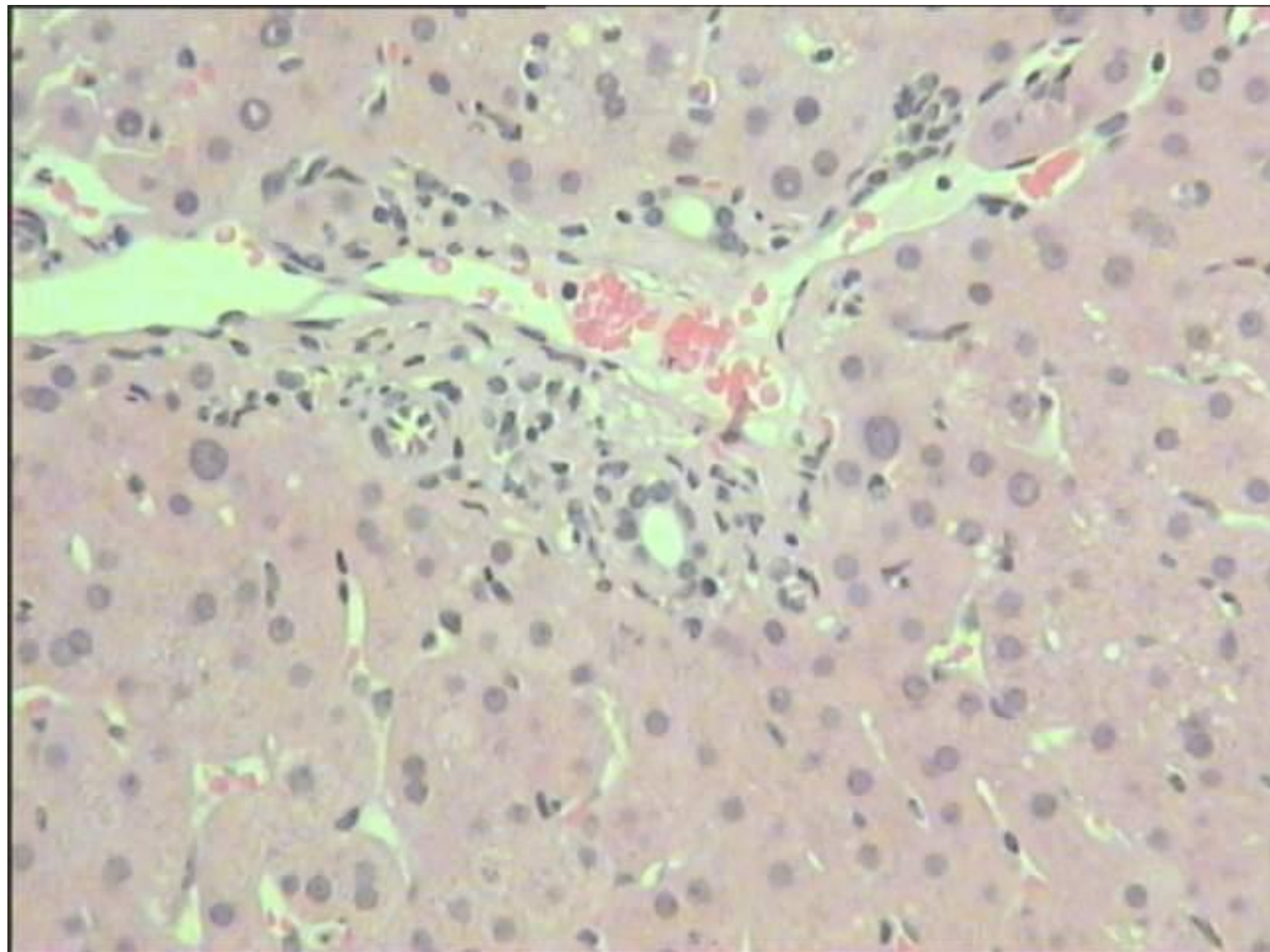
Anti mitochondrial Ab Positive 1:160.

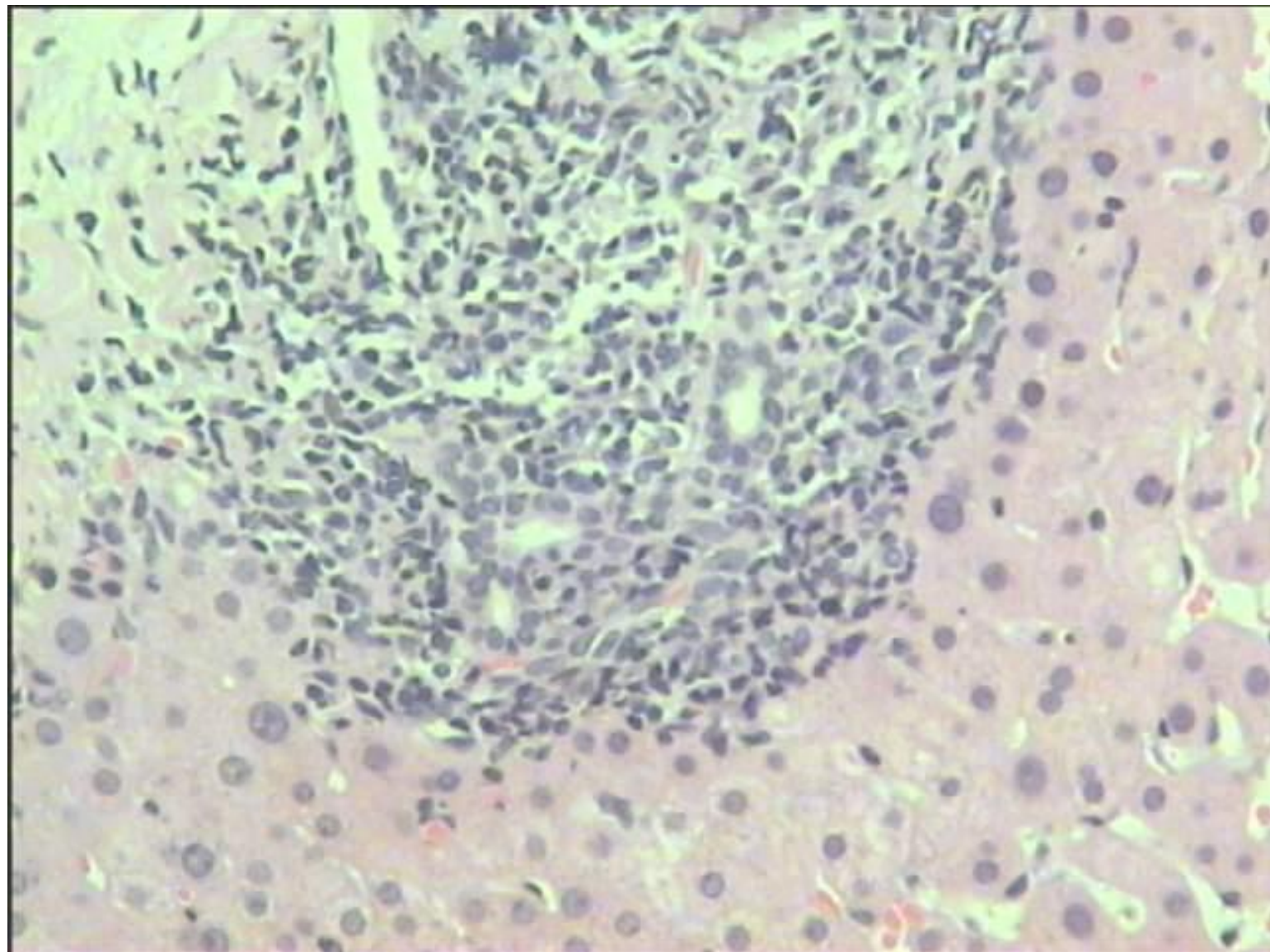
Nti Nuclear +ve 1:1640

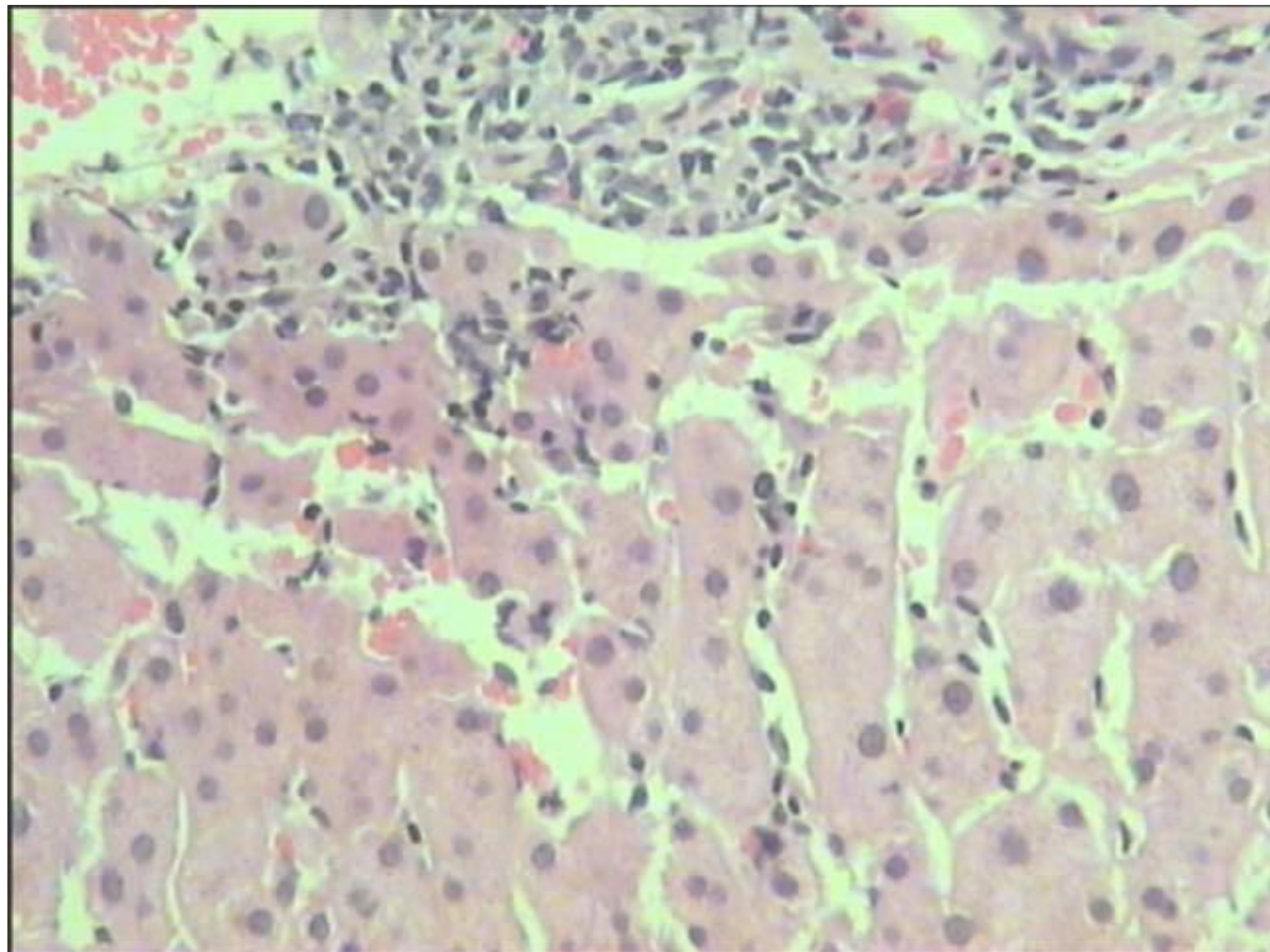
Anti smooth muscle negative











Case 180 Diagnoses

PBC	336
PBC/AIH overlap	54
Chronic active hepatitis, ?PBC, ?Autoimmune	10
Chronic Biliary disease – periductal fibrosis ?PSC but AMA favours PBC	10
Granulomatous hepatitis,, ?PBC, ?Sarcoid	10

Case 180: comments:

35% PBC have ANA

No interface here to indicate overlap with AIH

Overlap in view of lobular hepatitis component

Parenchymal activity part of PBC

Autoimmune cholangiopathy, also known as
immune cholangitis, in view of wide distribution
of chronic inflammation

ANF red herring – not hepatitic enough for overlap

Need ERCP/ultrasound 4 people

Case 180: comments:

Follow up:

Dr Sheehan, ANF was membranous and therefore due to anti lamin and not anti-ds DNA, therefore not autoimmune hepatitis.

This was first diagnosis of PBC, commenced treatment with ursodeoxycholic acid.

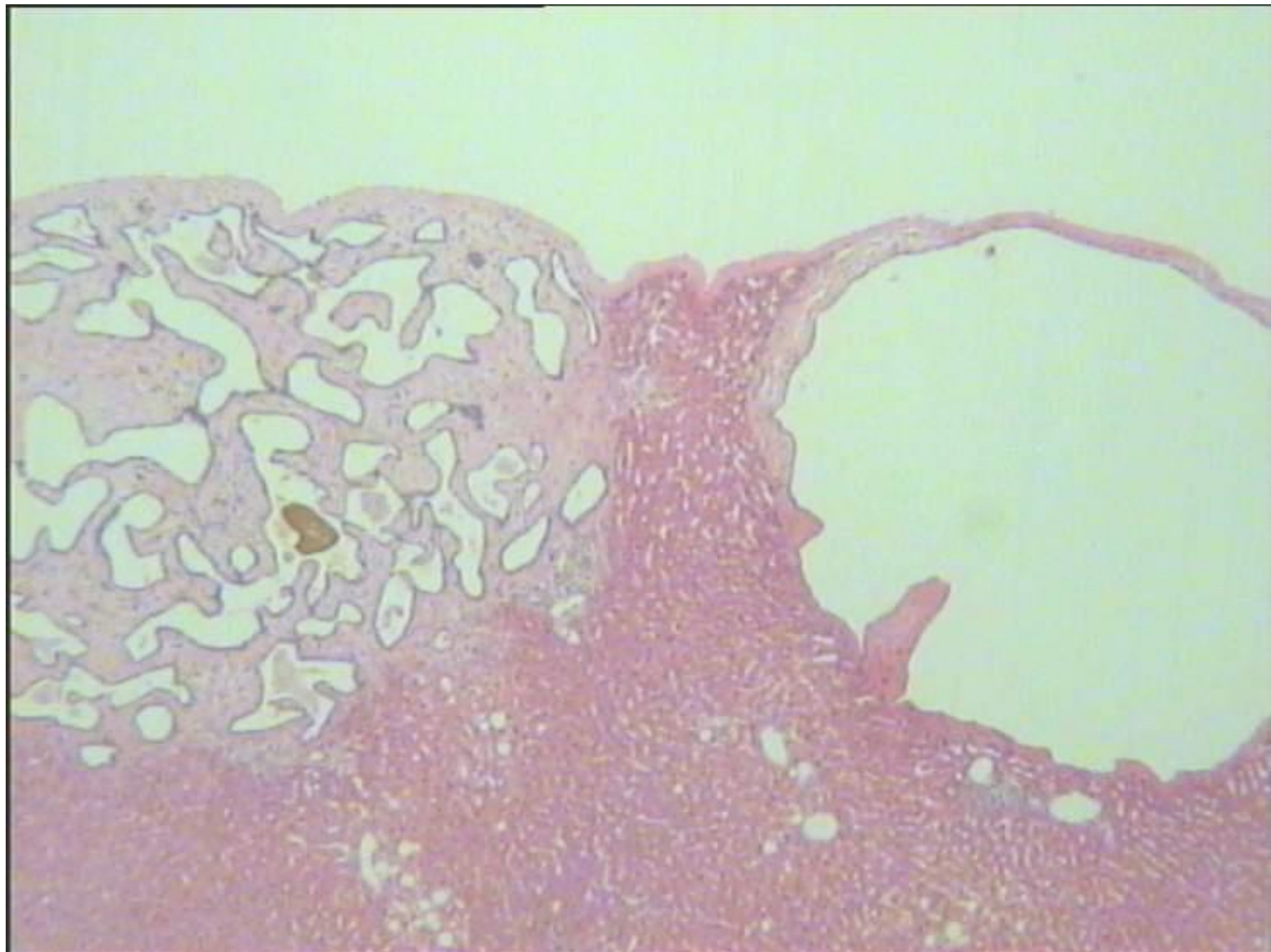
- Case 180 Discussion
Accept all as correct results.

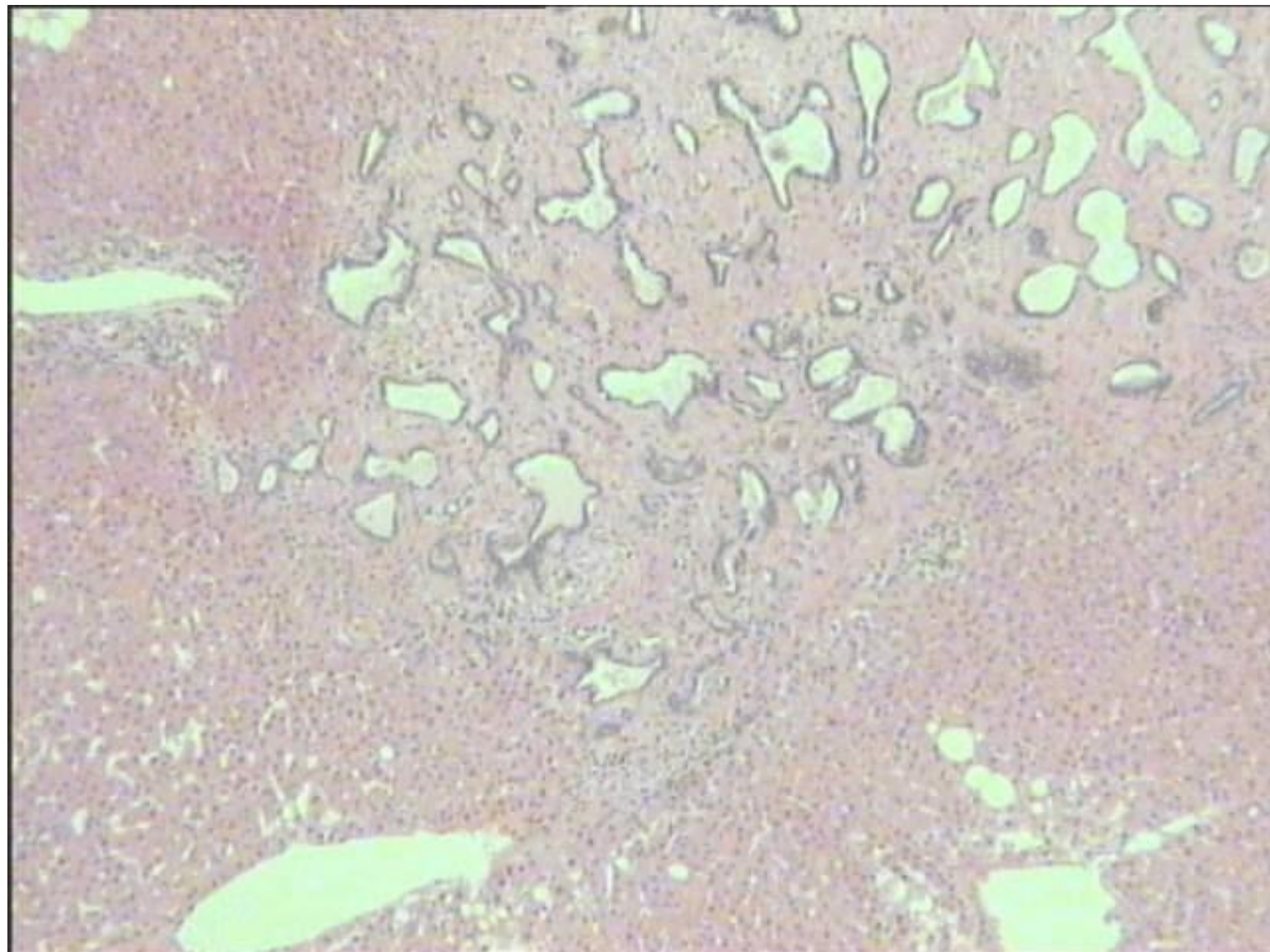
Criteria for diagnosing overlap with autoimmune hepatitis vary.

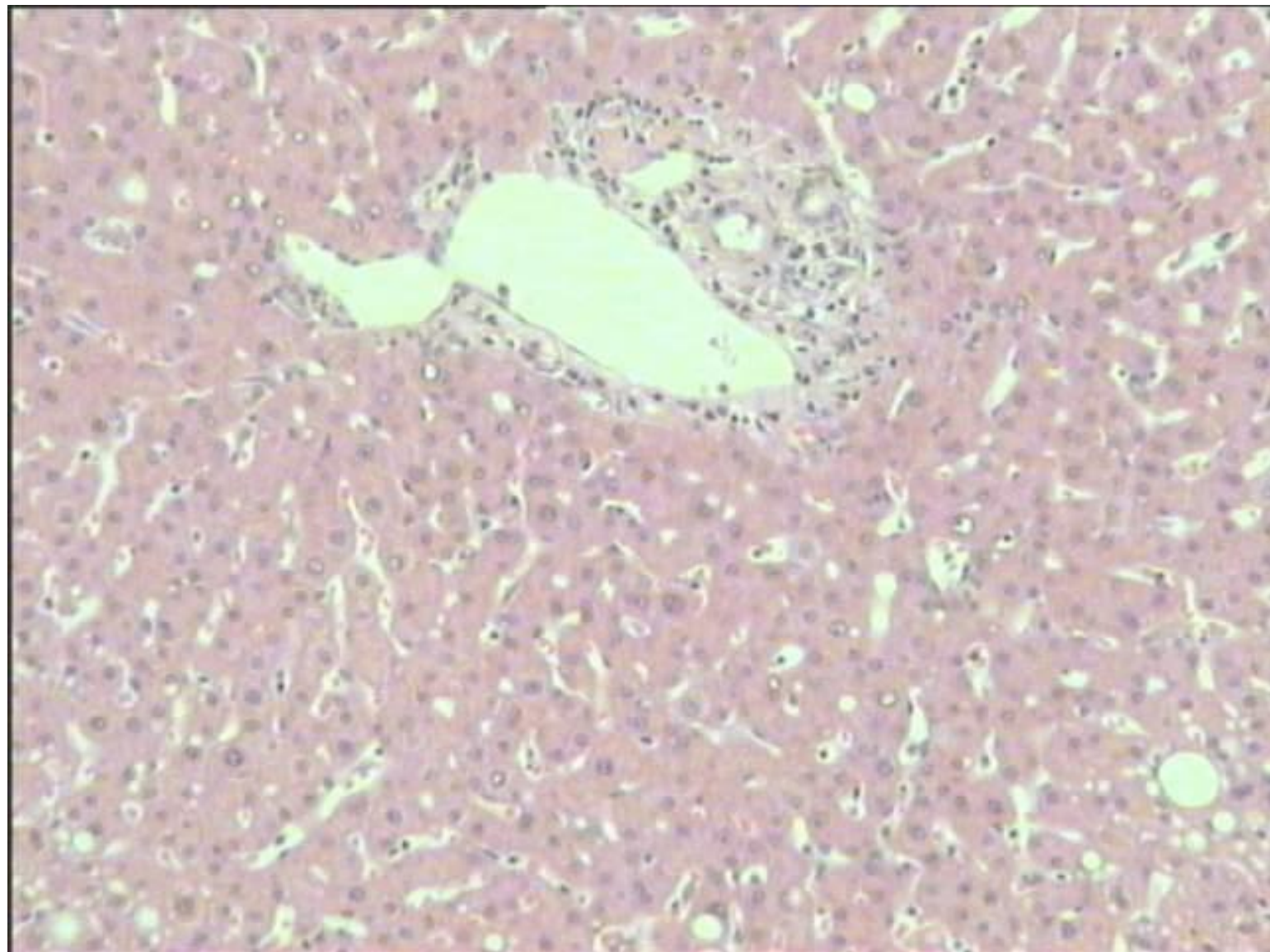
Case 181 History

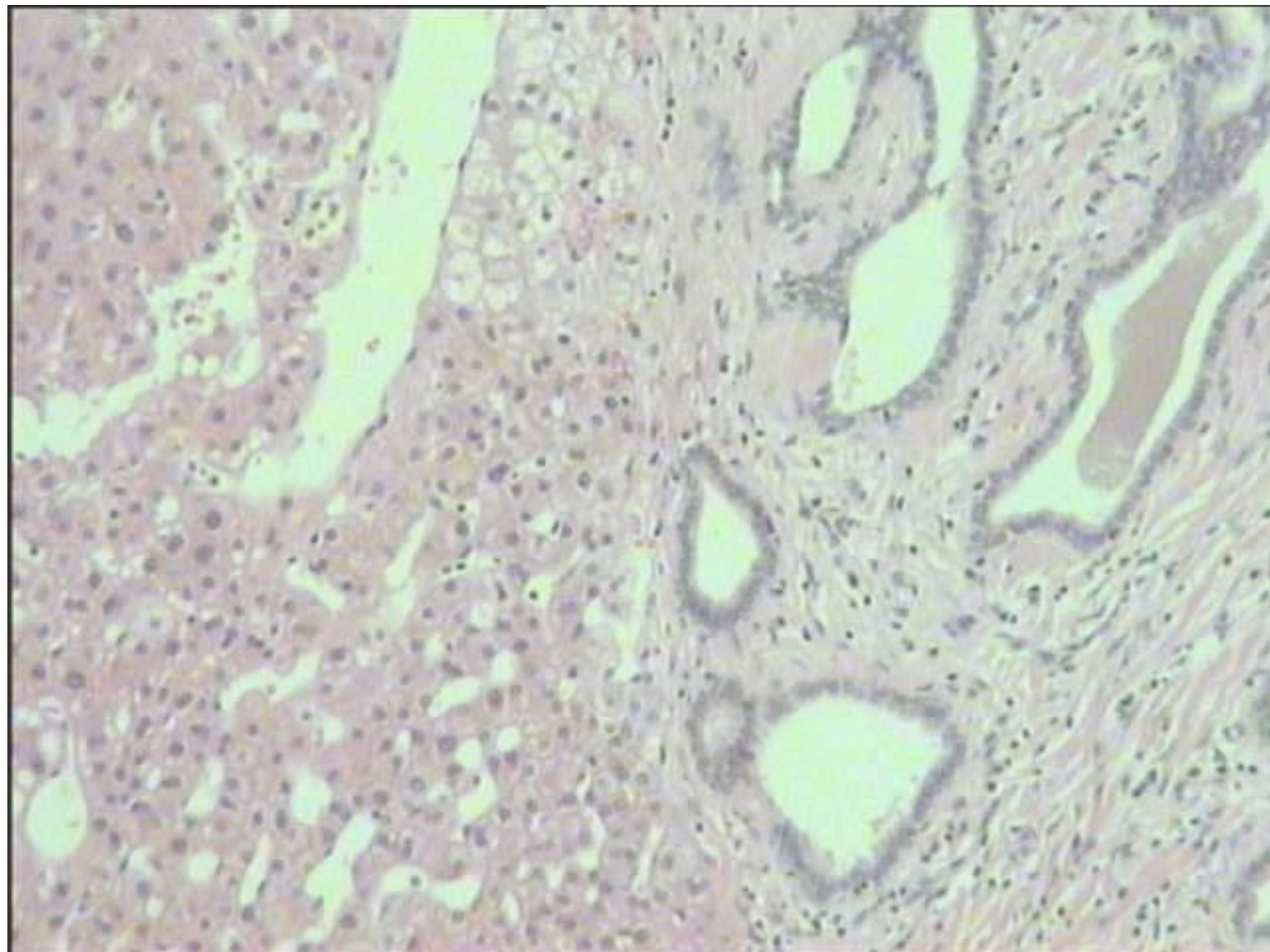
Male aged 62 years. Recently diagnosed with recto-sigmoid carcinoma. Nodules seen on surface of liver at operation.

Wedge biopsy of liver, 13mm diameter. Multiple dark nodules on surface – cystic appearance, ? metastases









Case 181 Diagnoses

Von Meyenberg complexes/ Biliary microhamartoma	390
Polycystic disease/VMCs	20
Bile duct hamartoma	30

Case 181: comments

Part of polycystic if macroscopic cysts present

Steatosis 4 people

Follow up: *Dr Sheehan,*

incidental finding during surgery for CRC

- Case 181 Discussion
Full consensus. Accept all diagnoses