


XVIII. Diseases of Liver, G. Bladder, Pancreas & Peritoneum
Liver

Acute Atrophy III- 6.18	
Slices of liver:	<ul style="list-style-type: none"> • Are small • Shrunken (as a whole) • Wrinkled capsule (indicating atrophy of liver)
Cut surface:	<ul style="list-style-type: none"> • Loss of pattern • Petechial haemorrhages (dark red) • Mottling with yellow foci • Bile-stained spots (jaundice) • A greyish-yellow background – • Apparent reduction in the spaces between portal vessels (indicating atrophy of liver-tissue)
Consistence:	<ul style="list-style-type: none"> • Soft
	
N.B.1:	
<ul style="list-style-type: none"> • The child died of diffuse hepatic massive necrosis. • The causes include: <ol style="list-style-type: none"> 1. Poisons: <ul style="list-style-type: none"> • Carbon tetra chloride, • Chloroform, • Cincophen and • Phosphorus (<i>mainly experimental, occasionally in over-dosage in human being</i>). 2. Severe viral infection (<i>Fatal viral hepatitis</i>). 3. Severe eclampsia (<i>Pernicious vomiting of pregnancy</i>). 4. Metabolic disturbances. 	
N.B.2:	
<ul style="list-style-type: none"> • The patient usually complains of fever, gastro-intestinal disturbances followed by hepatic disorder (jaundice) and renal disturbance (anuria). • The condition is fatal but if the patient survives → irregular massive scarring (post-necrotic cirrhosis). 	

N.B.3:

Necrosis of the liver

1. Focal:

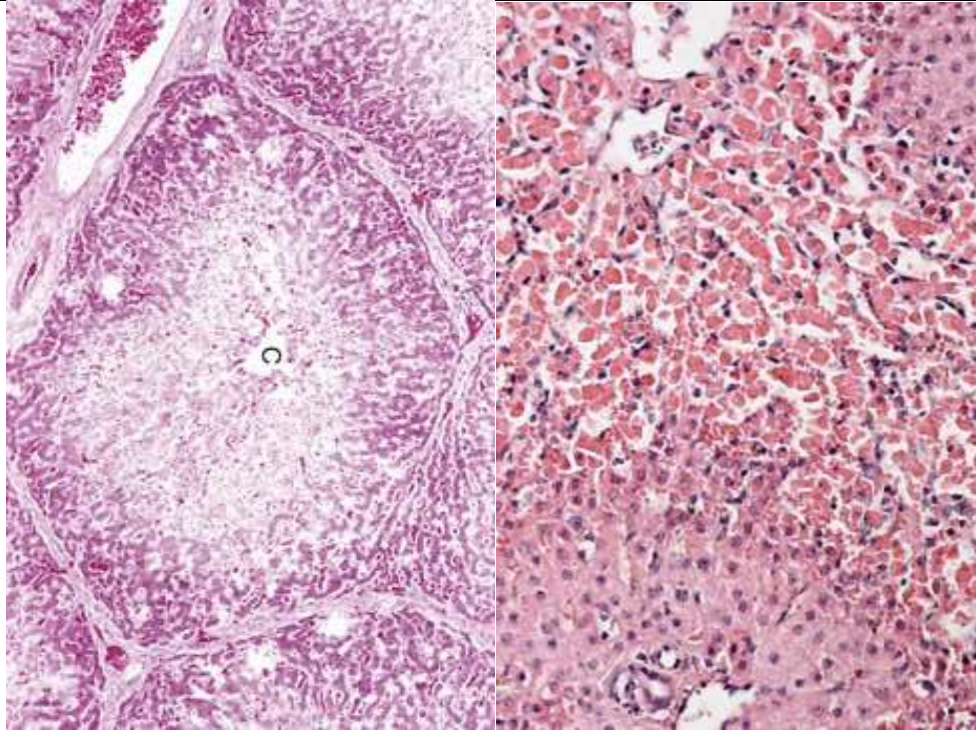
- As in typhoid fever, pneumonia or diphtheria (necrosis of few liver cells with no uniform distribution).

2. Zonal:

- a) ***Centri-zonal:*** As in severe chronic venous congestion (central haemorrhagic necrosis of liver), toxic conditions with chloroform, and carbon tetrachloride.
- b) ***Mid-zonal:*** As in yellow fever.
- c) ***Peripheral:*** As in phosphorous-poisoning and eclampsia (more focal and haemorrhagic).

3. Massive:

- As in acute diffuse necrosis (acute yellow atrophy) → necrosis and destruction with no definite limitation within the lobule or within the liver.



Central zone necrosis



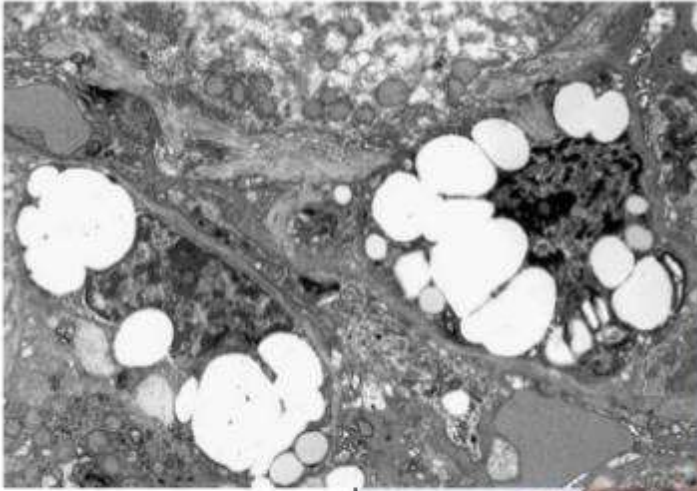
Subacute Atrophy III- 6.18

Liver:	<ul style="list-style-type: none">• Is moderately-reduced in size• Shows irregularity of the surface• Slight nodularity (regeneration)
	<p>Nodules:</p> <ul style="list-style-type: none">• Small (majority)• Large (few)• Rounded or irregular• Opaque pale yellow (lipoids)• Surrounded by greyish-pink tissue• No (or very slight) fibrous bands

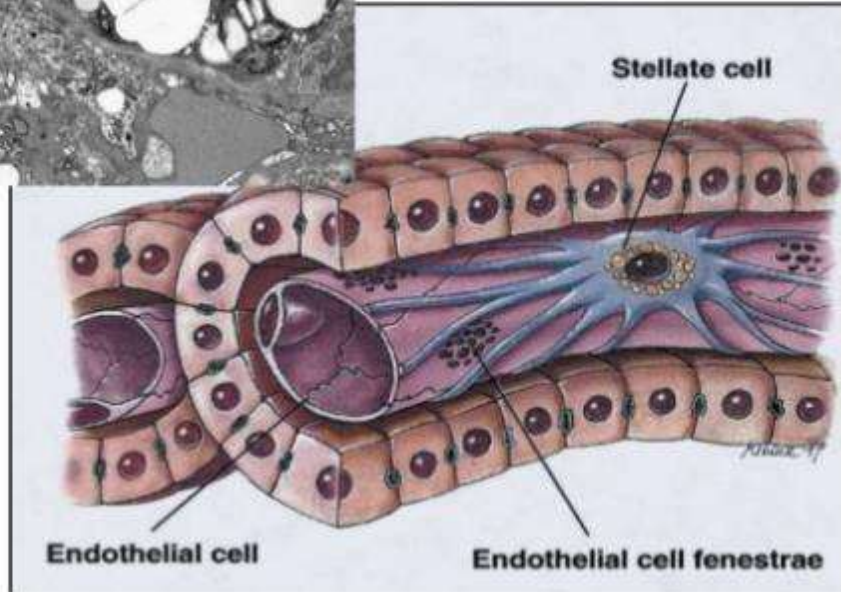
- **N.B.I:**
- This condition of subacute yellow atrophy.
- Is usually milder than the acute yellow atrophy and with less rapid course but with recurring attacks.
- When the patient survives, the liver is not seen in the stage of necrosis, but in the stage of multiple nodular hyperplasia, *that is, a certain "coarse nodular type" of cirrhosis.*



- **N.B.2:**
- **Other types (or causes) of liver-atrophy**
 1. Brown atrophy (occurring at old age and wasting diseases → organs such as liver and heart become smaller in size, deeper brown in colour and show excess of lipofuscin pigment).
 2. Pressure atrophy (occurring from excessive pressure on the liver cells by amyloid substance, tumour tissue, cysts etc...).



Hepatic stellate cell
(5-8% of liver cells)



*Tissues and Organs:
a text of scanning
electron microscopy,
Kessel, RG and
Kardon, RH, 1979*