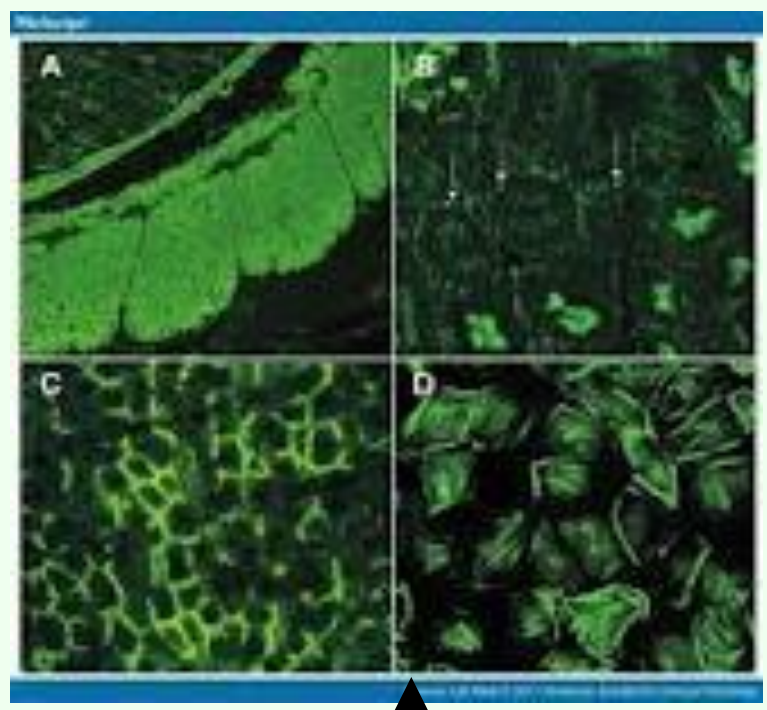
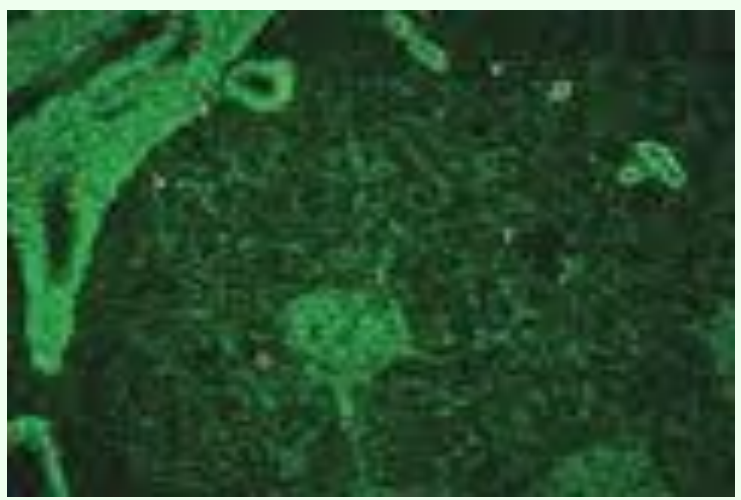
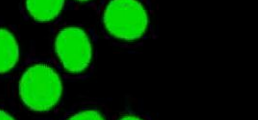
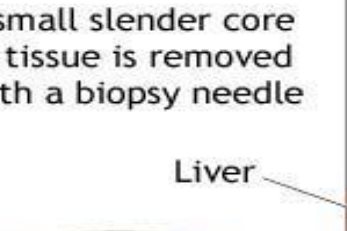


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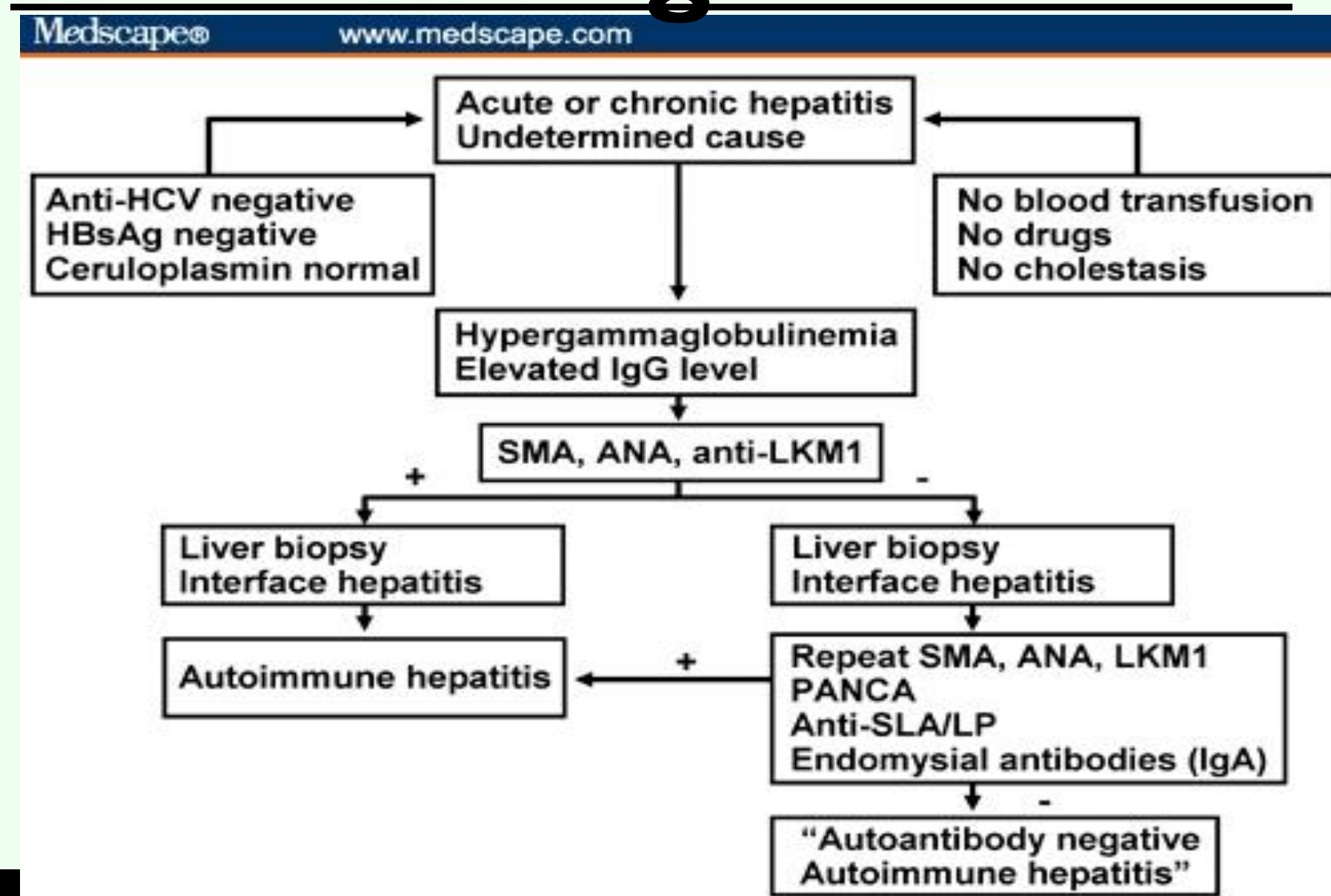
A small slender core of tissue is removed with a biopsy needle












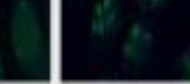

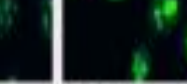




The diagram illustrates a liver biopsy procedure. On the right, a human torso is shown with the liver highlighted in red. A biopsy needle is inserted into the liver. A label 'Liver' points to the organ. On the left, a petri dish contains a small, slender core of tissue that has been removed from the liver. An arrow points from the needle to the tissue in the dish.

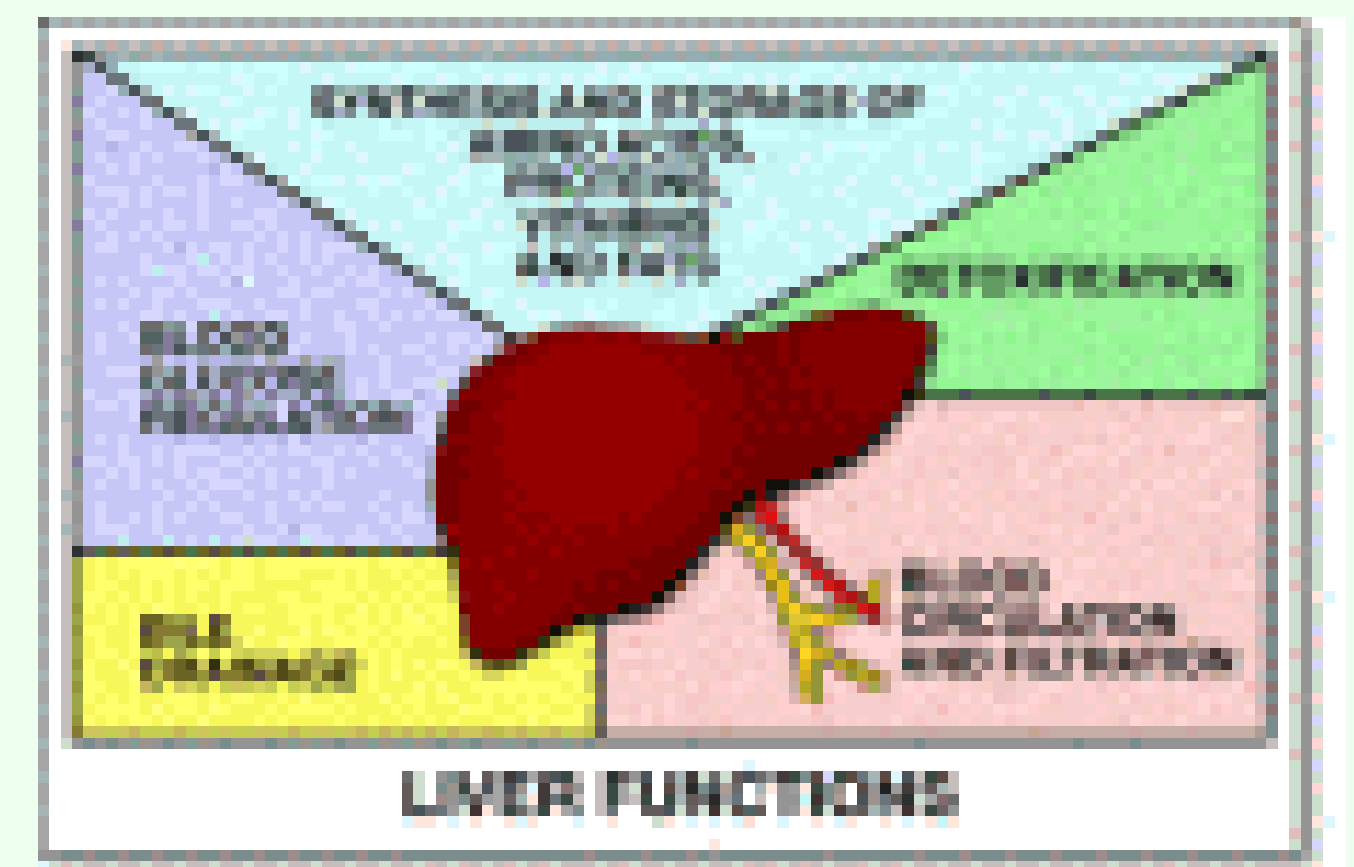
Liver Biopsy

How to diagnose AIH?

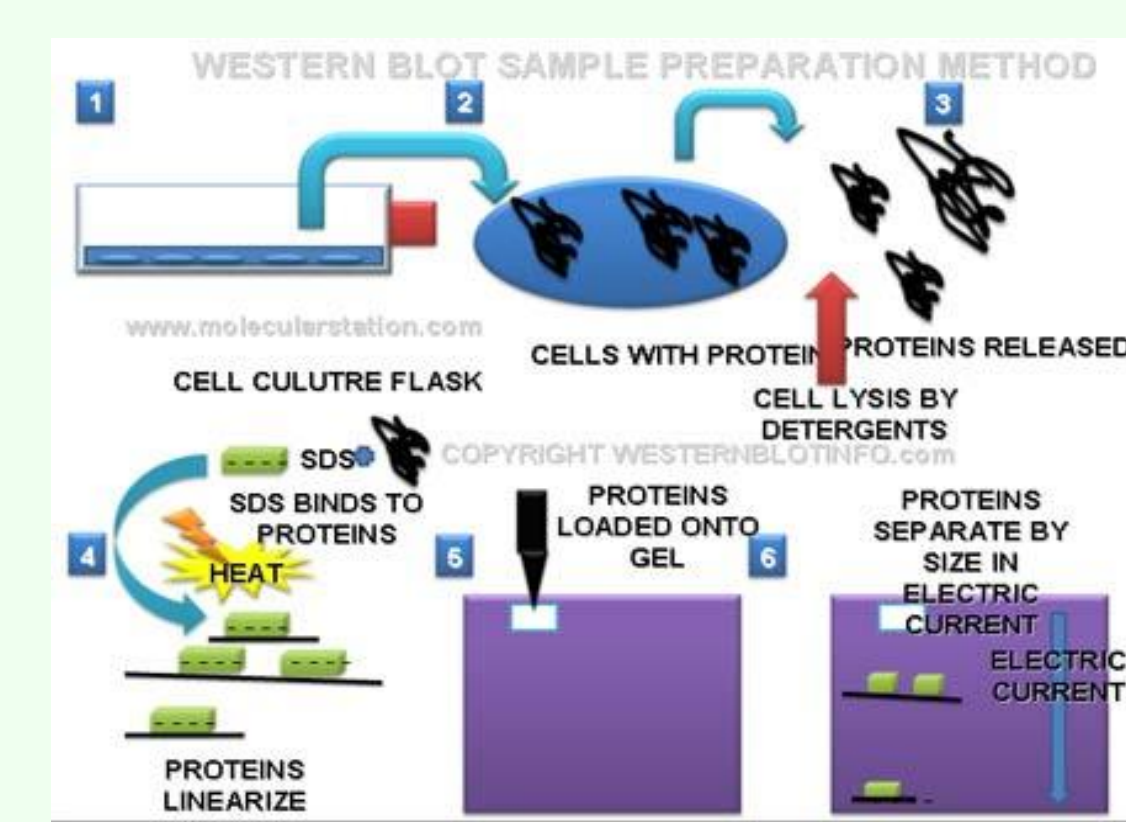


Blood sample collection

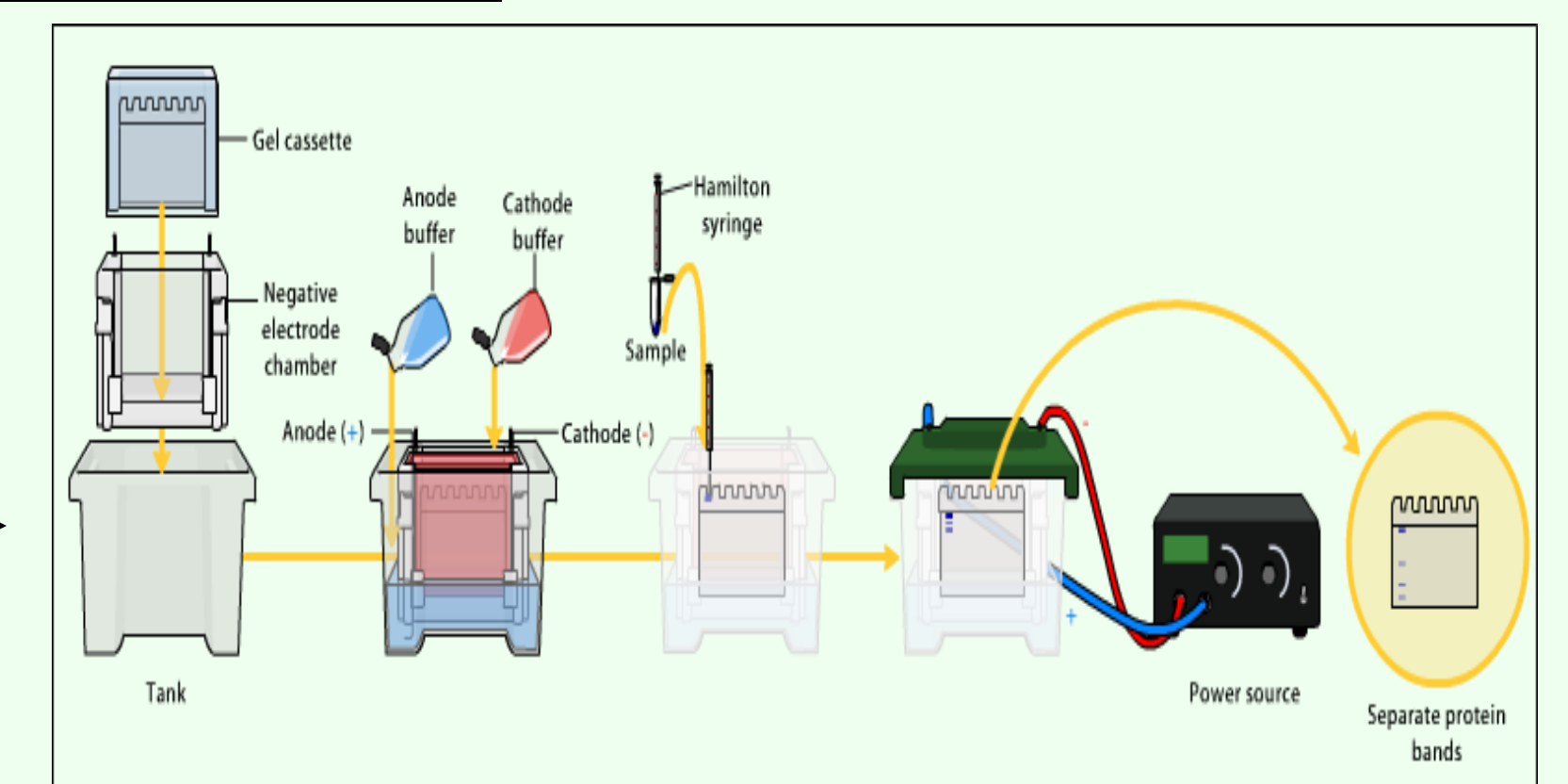
								
ANA homogen.	few nucl. dots	nuclear dots	centromere	ANA nuclear	fibrillar	Sol-70	SmRNP	SS-A/SS-B
								
nucl. membrane	cyclin I	cyclin II	ribosomes	mitochondria	golgi apparatus	lysosomes	actin	vimentin



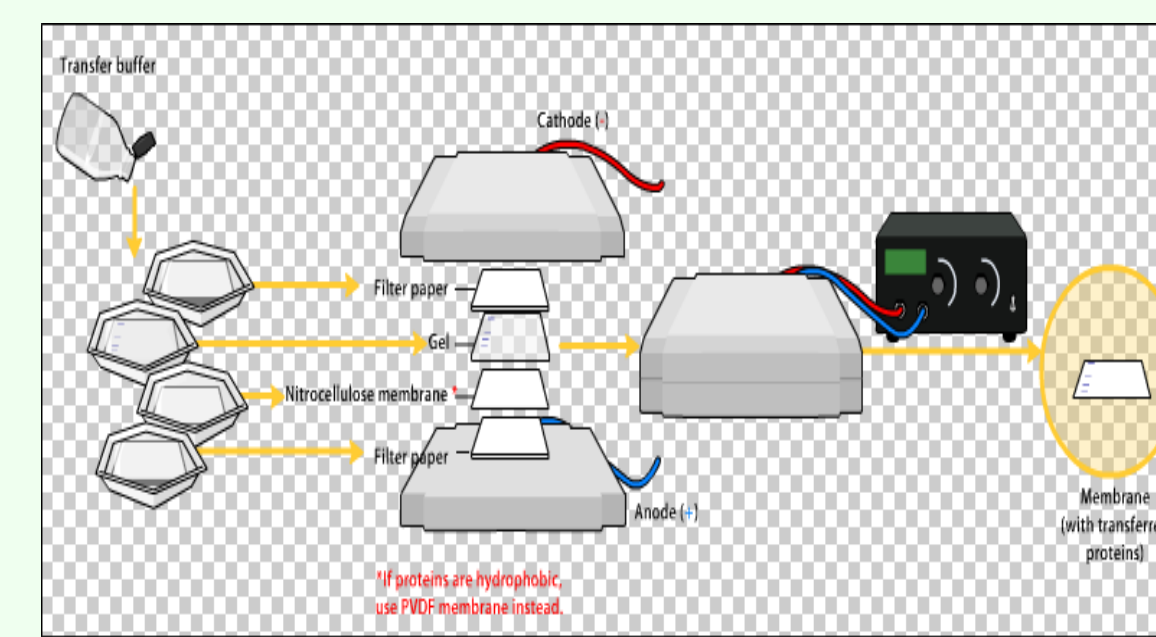
Western Blot



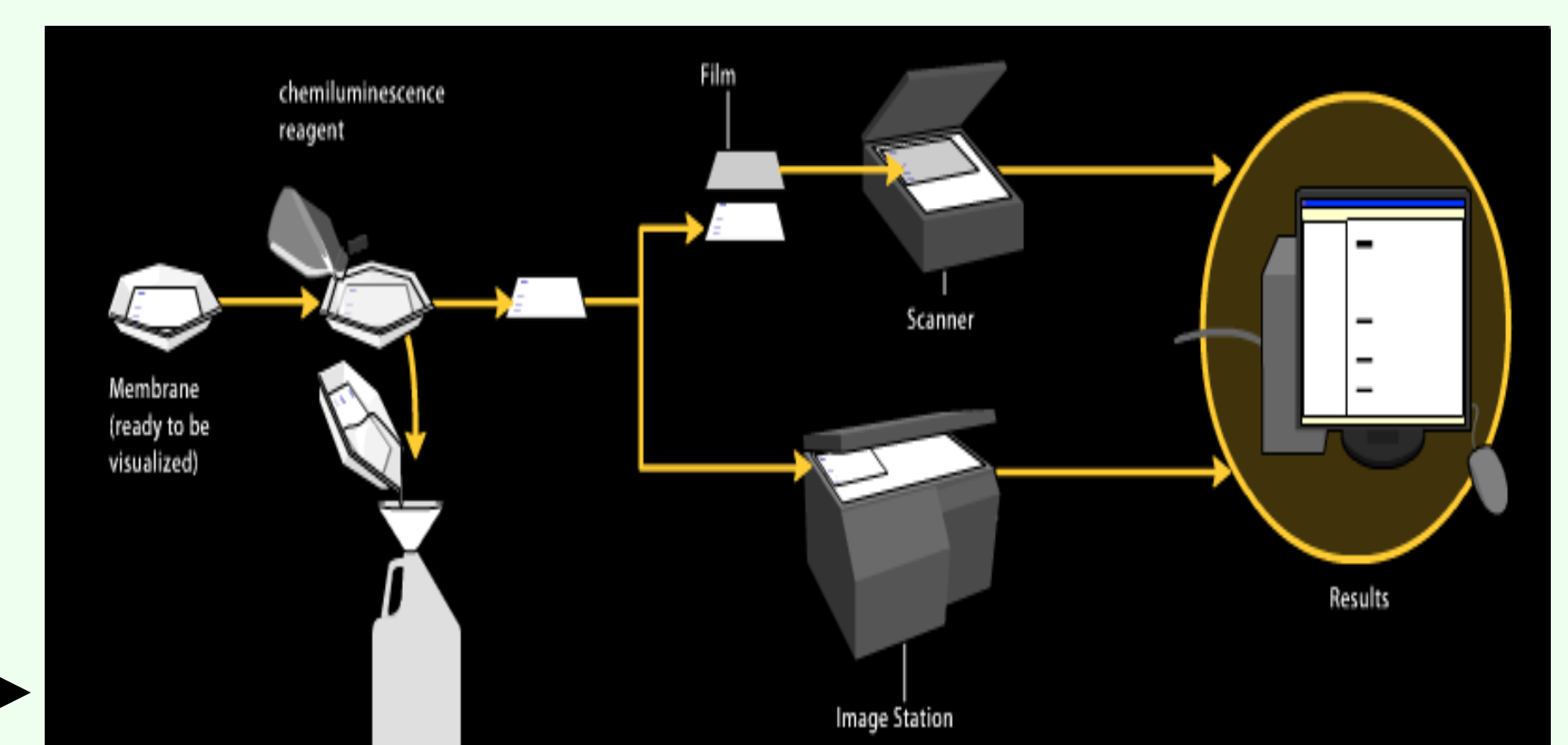
Sample preparation



SDA-PAGE electrophoresis



Western blot transfer



Chemiluminescent detection of Western blot

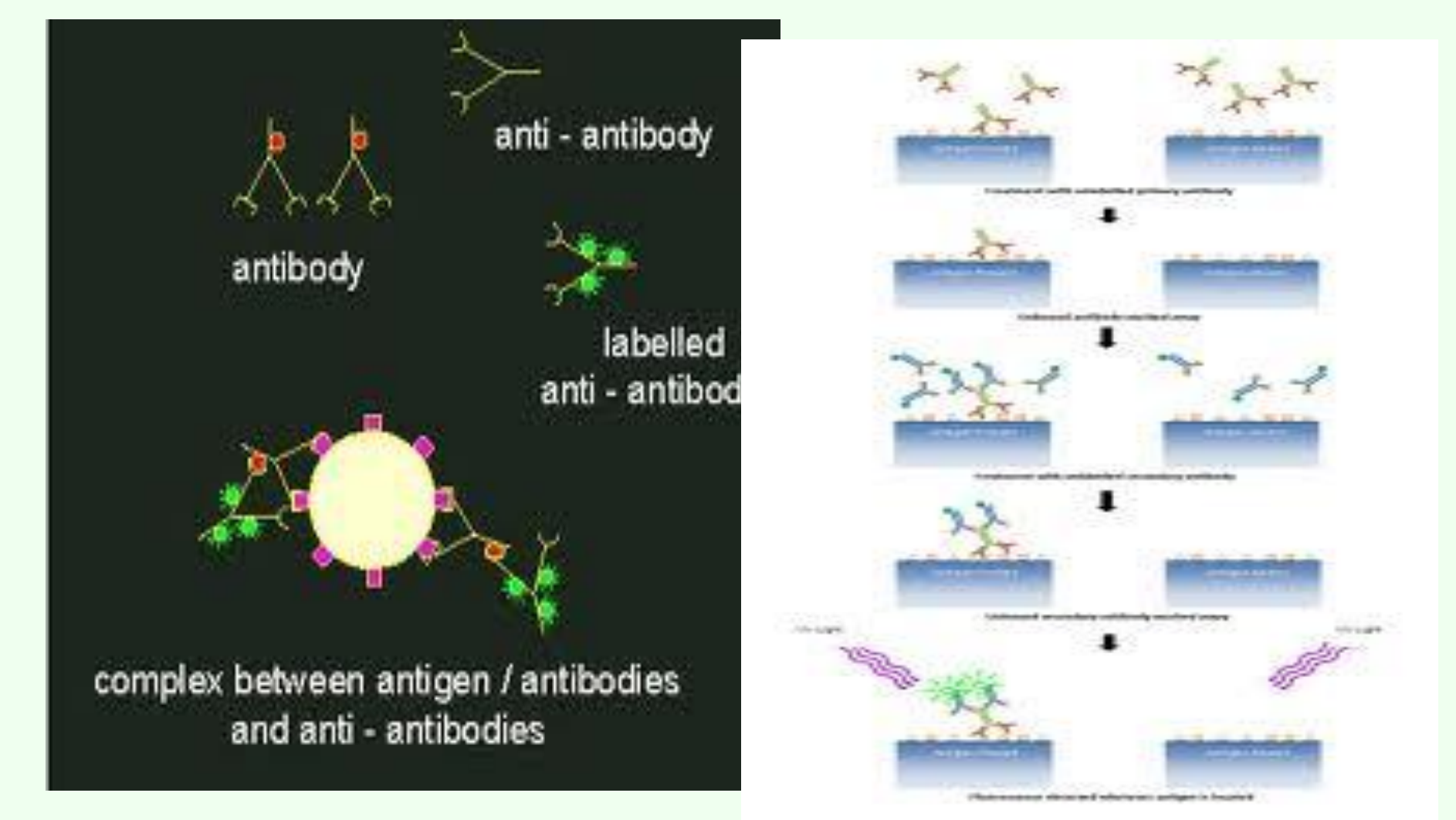
Sign

Hepatomegaly
Spider angiomas
Palpable spleen

Symptoms

Fatigue(87%.)
Dark urine &
Light colored stool(77%)
Right upper quadrant
pain
Malaise
Loss of appetite

Indirect Immunofluorescence



Objective

- To exploit the database in indian setting to determine nuclear antigens as target for antinuclear antibodies (ANA) in patients of autoimmune hepatitis (AIH) type1.
 - Type1 AIH is occurs when body's immune system attacks cells of the liver.
 - Type1 AIH is characterized by ANA and/ or ASMA positivity detected by immunofluorescence.

Methodology

- 75 patients >18 years who were ANA positive with indirect immunofluorescence titre >1:80, ALT >40U/L, serum IgG >16g/L, nonreactive viral hepatitis marker & within normal metabolic parameters were evaluated with immunoblots coated with nRNP, SS-A, SS-B, Scl-70, PM-Scl, Jo-1, CENP B, PCNA, dsDNA, Nucleosome, Histone, AMA-M2, LKM1, gp210, LCI, SLA antigen.
 - Interface hepatitis is the histologic hallmark of the disease.
 - No single AIH1 specific nuclear antigens has been identified so far.

Conclusion

Immunoblots with antigens Ro52, PCNA, nRNP, histones and nucleosome in indian settings can, detect antibodies with 82% of cases of AIH1 without immunofluorescence.