Patient Name	: **Mrs DUMMY 30**	Bill Date	:	
DOB/Age/Gender	:	Sample Collected	:	
Patient ID / UHID	:	Sample Received	:	
Referred By	:	Report Date	:	
Sample Type	:	Barcode No	:	
Client	:	Report Status	: Final Report	

Test Description	Value(s)	Unit(s)	Reference Range

SEROLOGY AND IMMUNOLOGY REPORT
Autoimmune Liver Diseases Profile IgG
Antimitochondrial M2 Antibody

Antimitochondrial M2 Antibody	TRACE	

Interpretation:

RESULT IN AU/mL	REMARKS
< 11.9	NEGATIVE
≥ 12.0-17.9	EQUIVOCAL
≥ 18.0	POSITIVE

COMMENTS

Primary biliary cirrhosis (PBC) is a chronic inflammatory disorder of the small and medium bile ducts and serologically characterized by the presence of circulating M2 autoantibodies. Anti-M2 autoantibodies belong to the group of anti- mitochondrial antibodies (AMA). The heterogeneously reacting specific AMA of the M2 subtype are directed against three related proteins of the alpha-keto acid dehydrogenase complex, which is located at the inner mitochondrial membrane. The major epitope recognized is located on the E2 subunit and the protein X of the pyruvate dehydrogenase complex (PDC). Additionally, AMA-M2-G autoantibodies recognize the (E1 alpha and E1 beta) subunits of the same complex and the E2 subunit of several other multienzyme complexes, such as the 2-oxo-glutarate dehydrogenase complex (OGDC) and the branched chain 2-oxo acid dehydrogenase complex (BCOADC). The determination of AMA-M2-G is a powerful tool in diagnosing PBC

SEROLOGY AND IMMUNOLOGY REPORT
Autoimmune Liver Diseases Profile IgG
M2-3E (BPO) Antibody

M2-3E (BPO) Antibody	Negative	

SEROLOGY AND IMMUNOLOGY REPORT
Autoimmune Liver Diseases Profile IgG
Sp100 Antibody

Sp100 Antibody	Negative	

SEROLOGY AND IMMUNOLOGY REPORT
Autoimmune Liver Diseases Profile IgG
PML Antibody

PML Antibody	10	

SEROLOGY AND IMMUNOLOGY REPORT
Autoimmune Liver Diseases Profile IgG
gp210 Antibody

gp210 Antibody	10	

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Patient Name	:		Bill Date	:
DOB/Age/Gender	:		Sample Collected	:
Patient ID / UHID	:		Sample Received	:
Referred By	:		Report Date	:
Sample Type	:		Barcode No	:
Client	:		Report Status	: Final Report

Test Description	Value(s)	Unit(s)	Reference Range

SEROLOGY AND IMMUNOLOGY REPORT

Autoimmune Liver Diseases Profile IgG

anti- liver-kidney microsomal IgG antibodies

anti- liver-kidney microsomal IgG antibodies   15

Interpretation:

RESULT IN AU/mL	REMARKS
< 11.9	NEGATIVE
≥ 12.0-17.9	EQUIVOCAL
≥ 18.0	POSITIVE

COMMENTS

Autoimmune hepatitis (AIH) is a progressive liver disease of unknown origin, which responds well to immunosuppressive therapy, but which, if not treated, has a negative prognosis. An accurate and early diagnosis therefore plays a fundamental role. AIH is characterised by the histological picture of periportal hepatitis in the absence of viral markers, by hypergammaglobulinemia and in most patients, by the presence of autoantibodies in the serum. Anti-nuclear antibodies (ANA), smooth muscle antibodies (SMA), anti-liver-kidney microsomal (LKM, liver-kidney microsomes) antibodies, and antibodies against soluble liver antigen (SLA) are marker autoantibodies for AIH. 52% of AIH patients are ANA and/or SMA positive, 20% SLA positive and 3% have anti-LKM-1 antibodies. All these antibodies are very important for diagnosing an AIH, however, so far only Anti-Soluble-Liver-Antigens have been highly specific for AIH. ANAs/SMAs are found in 10-15% of patients with viral hepatitis or other immune-mediated diseases. LKM-1s are alsofound in patients with hepatitis C. Anti-LKM antibodies can be divided into three types in relation to their respective target antigens. Anti-LKM-1 antibodies are directed against cytochrome p450 IID6, a 50 kDa cytoplasmic protein found in hepatocytes and renal proximal tubular cells. LKM-2 antibodies are associated with ticrynafen-induced hepatitis. The target antigen of LKM-2 is the cytochrome p450 IIC9, a cytochrome p450 isoenzyme, which catalyses the metabolic oxidation of the drug. Anti-LKM-3 antibodies are associated with chronic hepatitis D and their target antigen is UDP-glucuronosyltransferase. AIH associated with anti-LKM-1s occurs predominantly in childhood, especially in girls aged 2 to 14 years. The determination of anti-LKM-1 antibodies is therefore of paramount importance in paediatrics.

SEROLOGY AND IMMUNOLOGY REPORT

Autoimmune Liver Diseases Profile IgG

LC-1 Antibody

LC-1 Antibody   10

SEROLOGY AND IMMUNOLOGY REPORT

Autoimmune Liver Diseases Profile IgG

SLA/LP Antibody

SLA/LP Antibody   15

SEROLOGY AND IMMUNOLOGY REPORT

Autoimmune Liver Diseases Profile IgG

Ro-52 Antibody

Ro-52 Antibody   22

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Patient Name	:		Bill Date	:
DOB/Age/Gender	:		Sample Collected	:
Patient ID / UHID	:		Sample Received	:
Referred By	:		Report Date	:
Sample Type	:		Barcode No	:
Client	:		Report Status	:

Test Description	Value(s)	Unit(s)	Reference Range

Interpretation:

Note

1. It is recommended to confirm all positive results by Monospecific tests.
2. Autoimmune reactivities are not by themselves diagnostic, but must be correlated with other laboratory & clinical findings.
3. Test conducted on Serum.

Comments

Autoimmune liver diseases (AiLD) encompass the following diseases: Autoimmune hepatitis (AIH), Primary biliary cirrhosis (PBC) & Primary sclerosing cholangiitis (PSC). In addition, so-called Overlap syndromes can occur, i.e. the simultaneous presence of two different AiLD or one AiLD in combination with another autoimmune disease, for example Systemic sclerosis (SSc). Autoimmune hepatitis (AIH) is further divided into two subtypes namely, AIH type 1 and AIH type

2.Prevalence of various autoantibodies in Autoimmune liver diseases

Autoantibodies	Prevalence in AIH	Prevalence in PBC	Prevalence in PSC	Prevalence in Overlap syndrome
ANA	40% - 60% (AIH)			
100% (AIH - type 1)	5% - 50%	6% - 35%	5% - 100%	
dsDNA	20% - 30%			
ASMA	40% - 50% (AIH)			
60% - 90% (AIH - type 1)	25% - 50%	<10%		
SLA/LP	15% - 30% (Europe, North America) 7% (Japan)			<10%
Ro-52	5% - 19%	<5%		<10%
LC-1	10% (AIH)			
35% (AIH - type 2)				
LKM-1	3% - 5% (AIH)			
70% (AIH - type 2)				
AMA		85% - 95%		30% - 96%
M2-3E (BPO)	4%	90% - 95%		
Sp100		15% - 31%		
PML	4%	13%		
gp210	4%	26%		
Cenp		10% - 25%		
P-ANCA	10%	6% - 28%	40% - 50%	

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