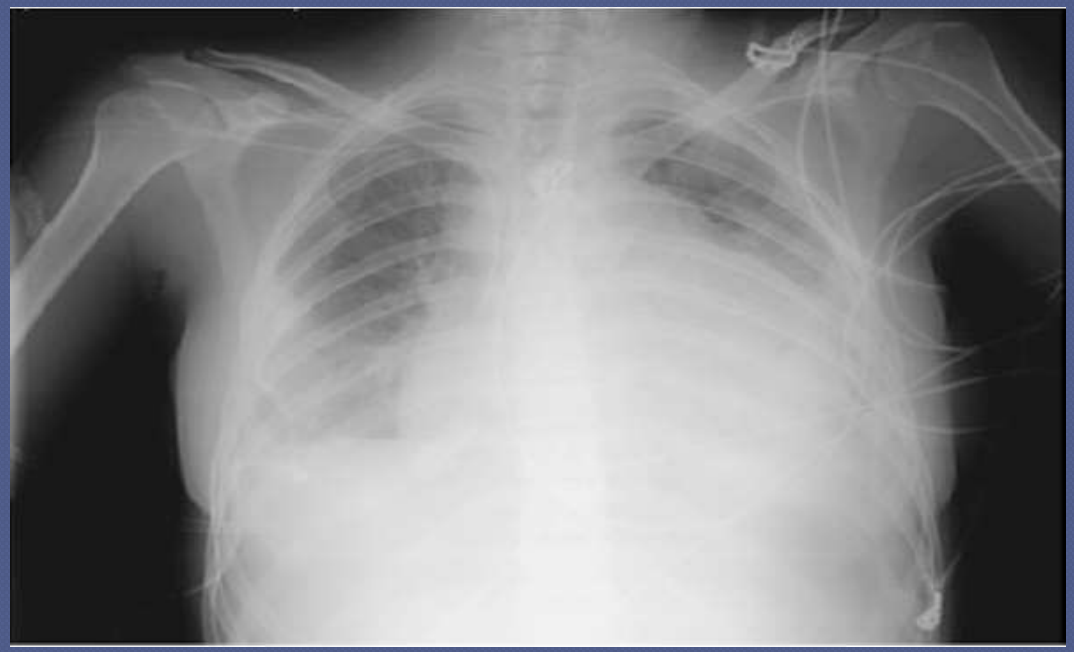
Joining The DOTS

Presented By,
Dr Jeevan.B
post graduate
Dr B. R. AMCH

HISTORY

- A 28Y/M patient from bangalore
- C/O
  - Fever on and off since 6 months.
  - Cough on and off since 6 months.
  - Shortness of breath 6 months.
  - Yellowish discolouration of eyes since 2 months.

- For 6 months he has took symptomatic treatment in many local clinics, later
- Patient was evaluated in private hospital and diagnosed as B/L pleural effusion.



- 2D echo shows pericardial effusion with EF-54%,no RWMA.
- Diagnostic and therapeutic pleurocentesis was done which shows lymphocytic predominance and was started with ATT.
- ATT was taken for 2 days, later he developed skin lesions over back, pain abdomen, ATT was stopped by himself.

- Came to our hospital after 1 month with

  - Persistent fever
  - Yellowish discolouration of eyes
  - Pain abdomen
  - Erythematus papules over shoulder, trunk, and pruritus all over the body.

- Fever was intermittent type, low grade, relieved on paracetamol tablets.
- Pain abdomen right upper quadrant pain, non radiating, dull aching type, associated with nausea, decreased appetite, multiple joint pain.
- No h/o weight loss

Past history – No previous h/o T.B, No h/o blood transfusion no h/o yellowish discolouration of eyes in past.

Personal history – no h/o alcohol consumption, drug abuse.

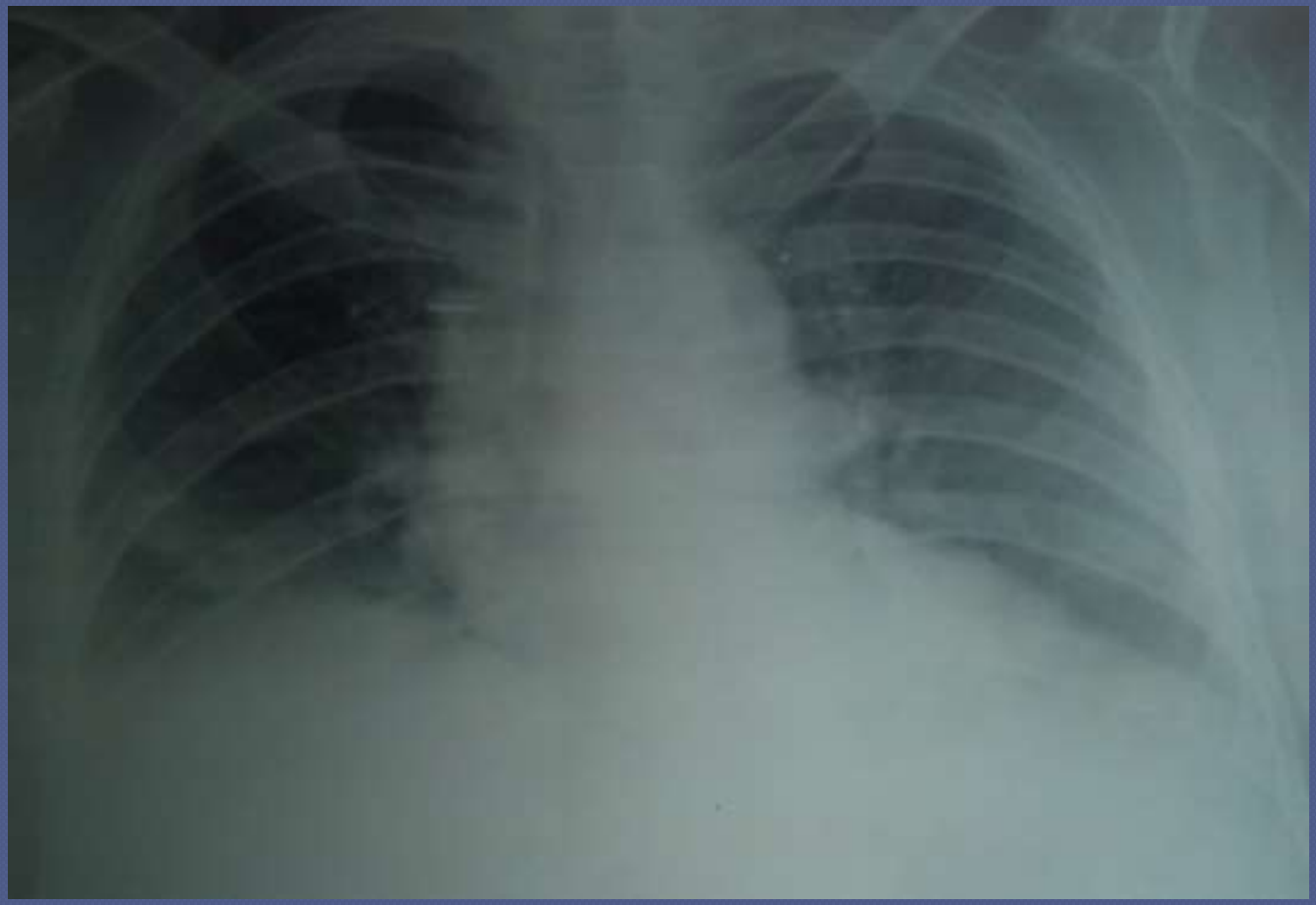
BMI – 20kg/m2.
Multiple hyperpigmented macules and erythamatous Papules over trunk and shoulder

Vitals – Temp-99.2F
pulse-90bpm
BP-120/80mmHg
Spo2-97%@RA
RR-22cpm

Icterus present
No other signs of liver cell failure

- S/E
  - CVS – S1 S2 heard,muffled,tachycardia present.
  - RS – Vocal fremitus, vocal resonance reduced on both infraaxillary area,

    dull note present in infrascapular, infraxilary area, decreased breath sounds in B/L infrascapular, infraaxillary area
  - PA – soft, tender hepatomegaly present Bowel sounds heard.
  - CNS – No focal neurological deficit.



- Hb – 12.1 g/dl
- TC – 10,200 c/mm3
- ESR – 76
- Platelet – 2.33 L/mm3

•PLEURAL FLUID ANALYSIS

- Glucose – 87
- Protein – 2.8
- Chloride – 95.6
- LDH – 257
- ADA 65U/L
- Cell type-Lymphocytes(90%)
- Cell count -300cells/cumm
- AFB- Negative
- Gene expert- Negative.

- PS for MP- negative
- Leptospirosis - negative

- Sr.TSH – 10.02 U/ml (0.4-4.5)
- f-T3 – 2.69 pg/l (3.1-6.8)
- f-T4 0.08 ng/l (0.8-1.9)
- HIV 1&2, HbSAg, HCV – Negative

- **LFT**

- Total protein -5.12 mg/dl
- Total bilirubin-7.7 mg/dl (0.3-1.3mg/dl)
- Indirect bilirubin-2.6 mg/dl (0-1 mg/dl)
- Direct bilirubin-5.12 mg/dl (<0.25mg/dl)
- SGOT- 255 (10-70)IU/L
- SGPT- 223 (10-70)IU/L
- ALP- 221 (40-120)IU/L
- GGT - 169

ECG- Poor "R" wave progression.

USG abdomen

•Coarse echotexture of liver with mild hepatomegaly, prominent IVC and hepatic vein, sugestestive of congestion.

Provisional diagnosis

- Pleuropericardial effusion. (?tubercular)
- Drug induced hepatitis

Treatment given

Considering hepatotoxicity, modified ATT was started.

- Bronchodilators – nebulization
- Inj Streptomycin 750mg OD
- Tab Ethambutol 800mg OD
- Tab Heptral 400mg OD
- Tab Thyronorm 12.5mcg OD
- Tab Propanolol 20mg OD
- Clindac A gel OD
- Tretin 0.05% L/A
- Supportive treatment

First Follow up 6 weeks after discharge

Came with C/o

- Persistent Yellowish discoloration of eyes.
- persistent fever
- Multiple joint pains
- Pain abdomen

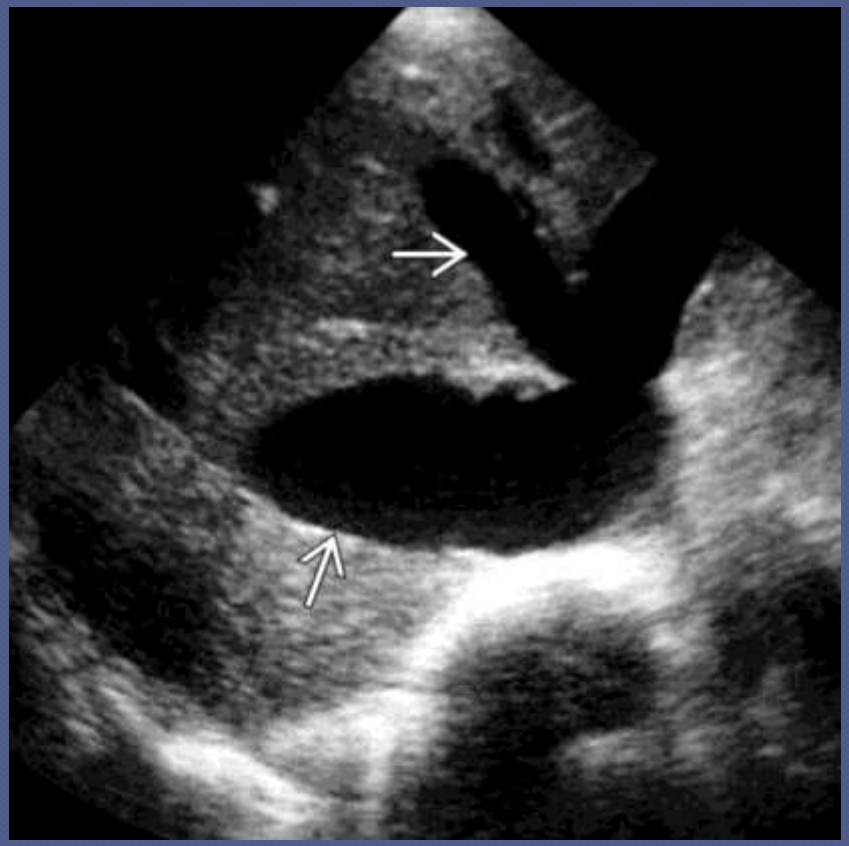
LFT

- Total bilirubin 5.3mg/dl
- Direct bilirubin 2.7mg/dl
- Indirect bilirubin 2.6mg/dl
- ALP 230U/L (42-141U/L)
- SGOT 30U/L
- SGPT18U/L
- GGT 120U/L (<55U/L)
- T protein 5.7g/dl
- Sr albumin 3.2g/dl

Viral markers- negative

Anti TPO- 40IU/ml

- CECT thorax was done – diffuse thickening and enhancement of parietal and visceral pericardium; with enlaged mediastinal lymph nodes, B/L pleural effusion, chronic hepatic venous congestion.



Differential diagnosis

- Drug induced hepatitis.
- ? Autoimmune hepatitis.
- ? Sarcoidosis

Confirmatory Investigations

CRP	87 mg/dl	(<6 mg/dl)
C3	122 mg/dl	(70 – 150)
C4	18.9 mg/dl	(10 – 40)

- Sr anti mitochondrial antibody - <1:40.
- Anti nuclear antibody – negative
- Anti smooth muscle antibodies- positive,(>1:80) IgG- positive.
- LKM(liver kidney microsomal antibody) negative.
- ANCA- Negative

- Diagnosis
- **AUTOIMMUNE HEPATITIS, with complications (pleuropericardial effusion)**
- According to (IAIHG) International autoimmune hepatitis group, score is 12, which suggest most probability of autoimmune hepatitis.

Table 3. Revised Original Scoring System of the International Autoimmune Hepatitis Group

Sex	Female	+2
AP:AST (or ALT) ratio	>3	2
	<1.5	+2
γ globulin or IgG level above normal	>2.0	+3
	1.5 2.0	+2
	1.0 1.5	+1
	<1.0	0
ANA, SMA, or anti LKM1 titers	>1:80	+3
	1:80	+2
	1:40	+1
	<1:40	0
AMA	Positive	4
Viral markers	Positive	3
	Negative	+3
Drugs	Yes	4
	No	+1
Alcohol	<25 g/day	+2
	>60 g/day	2

HLA	DR3 or DR4	+1
Immune Disease	Thyroiditis, colitis, others	+2
Other markers	Anti SLA, anti actin, anti LC1, pANCA	+2
Histological features	Interface hepatitis	+3
	Plasmacytic	+1
	Rosettes	+1
	None of above	5
	Biliary changes	3
	Other features	3
Treatment response	Complete	+2
	Relapse	+3
Pretreatment aggregate score:		
Definite diagnosis >15		
Probable diagnosis 10 15		
Posttreatment aggregate score:		
Definite diagnosis >17		
Probable diagnosis 12 17		

Our patient score is 12

Treatment Protocol followed.

- Tab – PREDNISONE 30 mg 1-0-1 (1week)

  20mg 1-0-1(1week)

  15mg 1-0-0(2week)

  Tapering dose to 5-10mg by one year.

- Tab AZATHIOPRINE 50mg daily 1-0-1
- Tab – URSODEOXYCHOLIC ACID 300 mg 1-0-1
- Tab – HYDROXYCHLOROQUINE 200 mg 1-0-1

- Patient was followed up, after fifteen days their was improvement in his symptoms and was doing better, later patient has lost follow up.

Discussion

- Autoimmune hepatitis (AIH) is an immune-mediated liver disease that can present in all ages and races and both sexes.
- Disease presentation is variable, ranging from asymptomatic disease to fulminant liver failure.

Discussion

- Clinically, AIH is characterized by raised serum alanine aminotransferase, hypergamaglobulinaemia, autoantibodies and interface hepatitis.

- Patients can present with a variety of non-specific symptoms,including jaundice, fatigue, lethargy, nausea, anorexia,weight loss, abdominal pain, pruritus,polyserositis, arthralgia,arthritis, acne, and amenorrhea

Discussion

- There is a strong association of AIH with other autoimmune diseases and up to 26% to 49% of the individuals with AIH will have concomitant autoimmune diseases.

- Autoimmune hepatitis type 1 is associated with autoimmune thyroiditis, Grave's disease, and ulcerative colitis while, AIH type 2 is associated with diabetes mellitus type1,vitiligo,and autoimmune thyroiditis.

Why am I presenting this case

- Autoimmune Hepatitis is 3 to 4 times more common in women. It can develop at any age, however, it is more commonly diagnosed in women around the age of 45. It can affect all ethnic groups.

Why am I presenting this case

- Our patient being a male despite female preponderance in that age peak with unusual symptoms at presentation.
- Published studies has suggested a survival for asymptomatic patients usually of at least 9–10 years.
- In those with symptomatic disease and jaundice, the reported survival was 7–8 years.

Take home message

- Patients may have a high mortality rate if diagnosis and intiation of treatment is not done early.
- Physicians should be aware of scoring system autoimmune hepatitis.
- High index of suspicion when jaundice is persistent, to keep autoimmune Hepatitis as differential diagnosis.


Thank you!