
**Liver Biopsy Results
In 32 Randomly Selected
Patients**

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Summary

Thirty two patients with clinical manifestations and signs were biopsied after appropriate investigations. The common finding was cirrhosis liver (31%) and next was hepatocellular carcinoma (18%). Overall the male predominance was noted in all the subgroups. Majority of cirrhotics were catogerised as severe disease and almost all were negative for HBsAg. All patients with hepatocellular carcinoma were positive for HBsAg.

One female patient had "Imferon" induced haemochromatosis and another patient had Wilson's disease.

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Material And Methods

Patients admitted to Medical "A" Unit, Hayat Shaheed Teaching Hospital and Medical "B" Unit, LRH/PGMI, Peshawar were studied for tissue diagnosis of liver biopsy in relevant clinical settings. All patients had at least the following investigations:

- (i) Blood complete examination.
- (ii) Urine complete examination.
- (iii) SGPT, Alkaline Phosphatase and Billirubin.
- (iv) Albumin/Globulin Ratio.
- (v) HBsAg.
- (vi) Prothrombin time.
- (vii) Upper abdominal Ultrasound and
- (viii) Liver scan (where indicated).
- (ix) Blood group and Rh factor.
- (x) Platelets count.

Patients with prolonged prothrombin time (which did not improve with Vit.K injections) were excluded from the study. Similarly patients with other standard contraindications¹ were also not included in the study.

Disposable true cut needle was used for liver biopsy and biopsy performed through an intercostal space².

All patients were subsequently observed for signs of bleeding and other complications for at least 24 hours. Post-biopsy analgesia was rarely required. Symptomatology and examination findings were recorded in a proforma.

Results

Total number of patients studied were 34, out of which 2 biopsies were unsuccessful. The data of 32 patients is, therefore, presented.

Out of 32 patients, 27 were from N.W.F.P. (Pakistan) and 5 from Afghanistan. The age and sex distribution was as under:

TABLE-1
AGE & SEX DISTRIBUTION

Sex	Mean Age	No. of Patients
Male	37.6 yrs	24
Female	47.0 yrs	8
Total	40 yrs	32

Symptoms

Anorexia and fever were the commonest symptoms observed in 22 (68%) and 17 (52%) patients respectively. The frequency of other symptoms was as under:

Yellowish sclera (n=15), swelling of abdomen (n=13), nausea and vomiting (n=8), black colour stool (n=6), loss of libido (n=4), itching (n=4), blood in vomiting (n=3), dyspnoea (n=2). 14 patients had injections in the past and 4 had blood transfusion. One female patient had history of getting more than 100 i/v infusions, each containing at least 5 ampoules of Imferon. One patient had a family history of neurological disorder.

EXAMINATION findings were as under:

Anaemia (n=25), hepato-splenomegaly (n=20), jaundice (n=15), oedema feet (n=13), hepatomegaly (n=8), palmer erythema (n=6), spider naevi

and clubbing (n=2), caput medusae (n=1) and decreased body hair growth (n=1). Parotid glands enlargement and gynaecomastia were not seen in our patients. One patient had Kayser Fleischer ring, confirmed on slit-lamp examination.

INVESTIGATIONS showed the following results:

Normal liver function test (n=11). Mean bilirubin in cirrhotic patients was 4mg% and two had 12.5 mg% per 100 ml. Albumin/globulin ratio reversal was seen in all but one patient with cirrhosis, and their average serum albumin was 3.08 gm%

HBsAg was done in 27 patients and 12 were positive for it. All patients with hepato-cellular carcinoma had +ve HBsAg, but only one cirrhotic patient had +ve HBsAg.

Other haematological and biochemical investigations did not reveal any significant change. Liver biopies showed the following results:

TABLE-2
RESULTS OF LIVER BIOPSIES AND SEX DISTRIBUTION

Diagnosis	No. of Patients	Male	Female
Cirrhosis Liver	9	7	2
Hepato-cellular Carcinoma	6	4	2
No Significant Change	5	5	0
Cholestatic Jaundice	4	2	2
Chronic Active Hepatitis	3	2	1
Chronic Persistent Hepatitis	1	1	0
Haemochromatosis	1	0	1
Granulomatous Hepatitis	1	1	0
Tropical Splenomegaly	1	1	0
Inconclusive	1	1	0

Two male patients with chronic active hepatitis were positive for HBsAg and one female patient had -ve HBsAg but +ve ANF.

Discussion

Cirrhosis was the commonest finding on liver biopsies which is an expected observation. However, this subgroup of patients showed some interesting findings. All except one were negative for HBsAg but the aetiology could still be HB virus as we did not screen them for other markers of hepatitis. However, non-A non-B hepatitis can not be excluded from the aetiology which is the commonest type of hepatitis in Pakistan². Post-necrotic cirrhosis usually causes shrinkage of liver due to fibrosis and liver is generally not palpable in these patients, but interestingly most of our patients had palpable liver (with or without splenomegaly). We did not find Dupuytren's contractures or parotid enlargement in any of our patients and only two patients had spider naevi. All these are said to be more common in alcoholic cirrhosis³.

Hepato-cellular carcinoma was present in 6 (18%) patients which is an alarming number. All these patients had positive HBsAg. In four of these patients, the diagnosis was not picked up by ultrasound (which suggested cirrhosis only); and liver biopsy (done to confirm cirrhosis) revealed this diagnosis. One patient had a solitary tumour on ultrasound while the other had multiple lesions-suggestive of secondaries.

Hepatitis "B" has been a well established risk factor in hepatocellular carcinoma⁴ and it is a common cause of hepatitis in our patients⁵. Mean age of the patients with hepatocellular carcinoma was 52.5 years for both sexes. In Chinese and Bantu the sufferers are often below 40 years and in temperate climates the age is usually above 40⁴.

Three patients had chronic active hepatitis including 2 male and one female. Both male patients were positive for hepatitis and it is well established that chronic active hepatitis in male is usually due to HBV⁶. The female patient had lupoid hepatitis.

One female patient had Imferon induced haemochromatosis and rep-

resents the misuse of I/v solutions and so called "TONICS" in our society by quacks. In fact over the past few years we have seen 4 patients of haemochromatosis, 2 each from I/v iron and multiple blood transfusions.

Another patient with non-specific changes on liver biopsy had Wilson disease. He and his brother both suffered from neurological problem and both had marked Kayser Fleischer ring confirmed to be in the desmet membrane on slit lamp examination.

Anorexia and fever were the commonest symptoms in our series as reported by others in liver disease⁷.

Conclusions

(i) The commonest presenting symptoms in our patients were anorexia and fever, while anaemia, jaundice and hepato- splenomegaly were the commonest signs.

(ii) Cirrhosis is the commonest pathological diagnosis on biopsy and most of the cirrhotic patients presented late and had severe disease.

(iii) Hepatocellular carcinoma is a common finding and should be strongly suspected in patients above 50 years of age. The diagnosis may be missed by ultrasound and thus CT scan and liver scan might be helpful in suspected cases before a liver biopsy. Multiple lesions on ultrasound could also be due to hepatomas and should be suspected in patients with cirrhosis or in patients where a primary is not found on investigations.

(iv) Use of parenteral iron should be discouraged and medical staff and patients should be educated regarding its use.

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