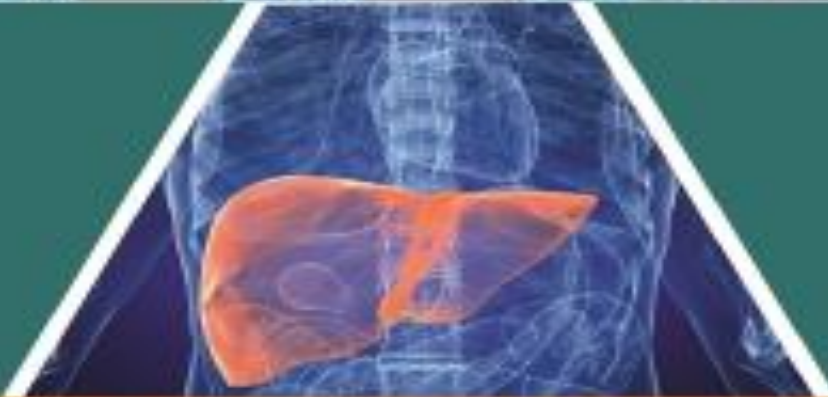
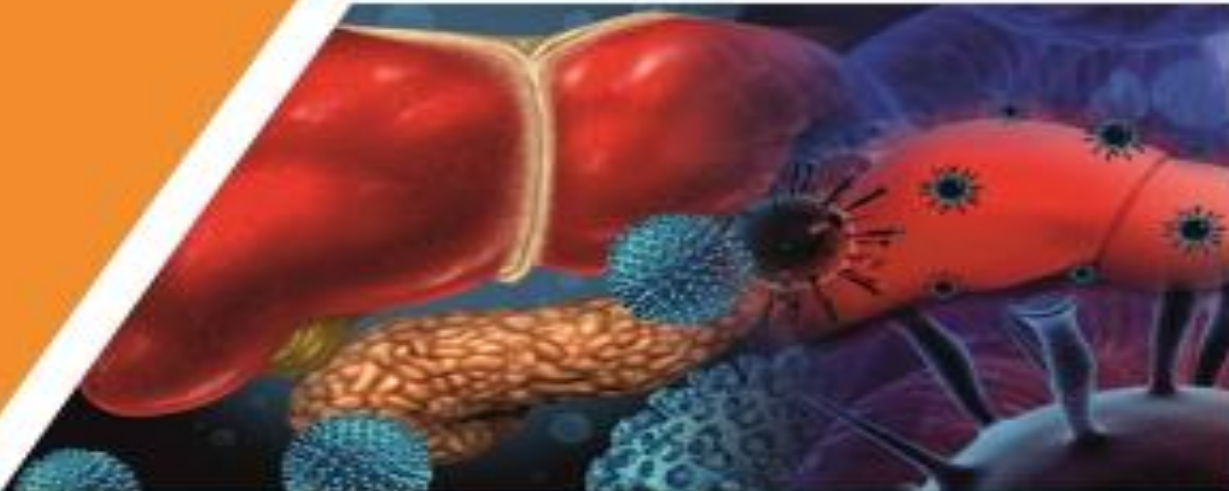




PROJECT PRAKASH

Programmed Approach to Knowledge and Sensitization on Hepatitis



HEPATITIS INDUCTION PROGRAM FOR DOCTORS

**PRE AND POST TEST
COUNSELLING OF
PATIENTS AND FAMILY**

**Dr. Harsh Vardhan Tevathia,
Assistant Professor
Dept of Hepatology, ILBS**

INSTITUTE OF LIVER & BILIARY SCIENCES, NEW DELHI

www.ilbs.in



INSTITUTE OF LIVER & BILIARY SCIENCES, NEW DELHI

Issues...

- Why counselling
- WHO guidelines
- Screening tests for Hepatitis B and C
- Special patient group- Pregnancy, Children
- High risk group- immunocompromised
- Family screening

Counselling!!

- Promoting testing awareness
- Focus on specific population
- Creating an enabling environment
- Reduce stigmata and discrimination

WHO 5 C's for hepatitis testing

Consent

- Must give informed consent
- Verbal consent is sufficient
- Right to decline

Each person has a private opportunity to opt out of testing.

WHO 5 C's for hepatitis testing

Confidentiality

- Ensuring a confidential setting and preserving confidentiality
- Not only to test result but also to other personal information
- lack of confidentiality discourages people from using testing services

WHO 5 C's for hepatitis testing

Counselling

- All people should have the opportunity to ask questions
- Post-test counselling
- QA mechanisms as well as supportive supervision and mentoring systems, to ensure the provision of high-quality counselling

WHO 5 C's for hepatitis testing

Correct

- High-quality testing services
- Quality assurance- including support from the national reference laboratory

WHO 5 C's for hepatitis testing

Connection

- Linkage to prevention, treatment and care services should include effective and appropriate follow up, including long-term prevention and treatment support

Providing Pre-test information

- Viral hepatitis and the benefits of testing for hepatitis B or C; and the meaning of a positive and negative test result
- A brief description of prevention options
- The confidentiality of the test result, as well as any information shared by the client

Post test counselling and service- who test positive

- Provide clear information on further tests to be provided to confirm stage of liver disease
- Assess need of referral
- Provide information on prevention of transmission and lifestyle modification
- Family screening

Post test counselling and service- who test negative

- Explanation of a negative result
- Offer HBV vaccination
- Repeat testing of HCV if patient of high risk group

Hepatitis B

Prevent HBV disease progression

- ↓ **Cirrhosis**
- ↓ **HCC**

How you get the Virus !

Mode determines Outcome

- Horizontal
 - 95% clear
- **Perinatal : Mother to Baby Transmission**
 - 90% Persists Life long
 - Looks Healthy

Serum markers of Hepatitis B

- Infection HBsAg, HBV DNA+
- Replication HBeAg, HBV DNA++++, IgM anti-HBc
- Exposure Anti HBc IgG, Anti-HBe, Anti-HBs
- Protection Anti HBs

Who is a healthy carrier!

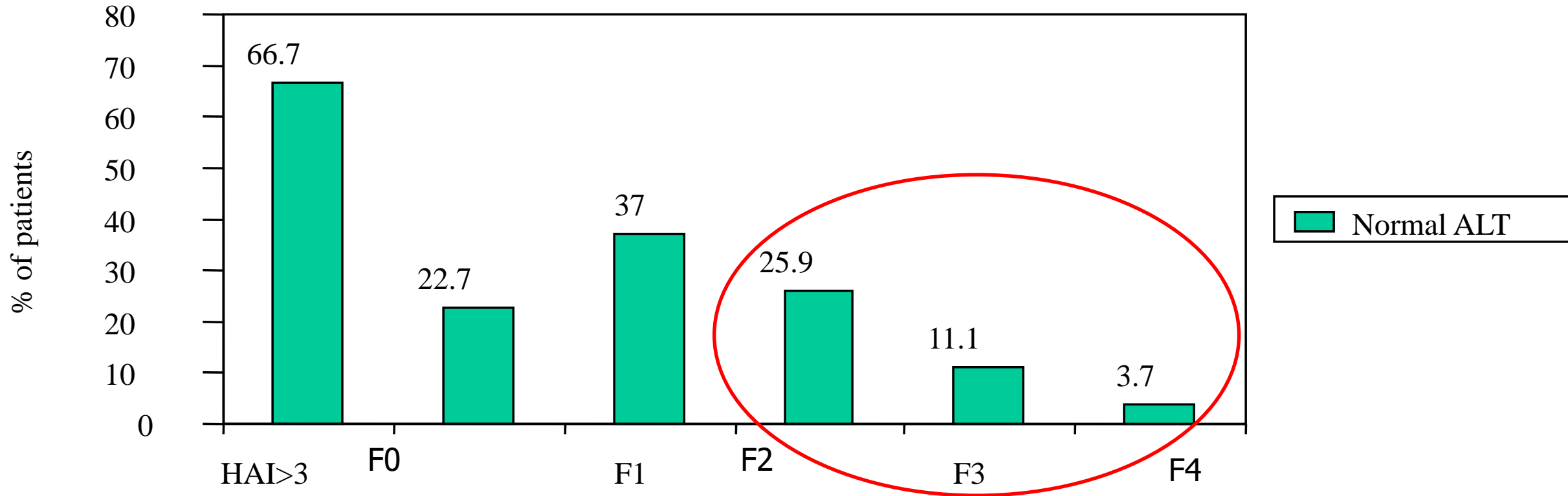
- Infected with Virus
- Can transmit
- Does not suffer !

Hepatitis B Virus Carrier Is he really healthy ?

Incidentally Detected Asymptomatic HBsAg Positive Subjects: (IDAHS)

| Patient characteristics | Persistently N ALT, N=73 | Intermittently N ALT, N=117 | P |
|-------------------------|-----------------------------|--------------------------------|-------|
| Age(yr) | 27.7±15.3 | 30.8±16.1 | 0.192 |
| HBVDNA >5 log cp/ml | 60.3% | 72.1% | 0.001 |

40% of asymptomatic Hepatitis B +ve subjects with Normal ALT have hepatic Fibrosis



Kumar et al. Gastroenterology 2008

Kumar and Sarin Gastroenterology Aug 2009

“Chronic HBV Carrier”

Is a misleading term

Replaced by

“Chronic Hepatitis B Virus Infection”

Ind J. Gastroenterol 1999; 18 : S15, JGH, GE 2001, J Hepatol 2003, Gastroenterology 2008,2009, 2009

Assessment of patients with chronic HBV infection

| HBV marker | Liver Disease |
|-----------------|---------------------------------------|
| HBsAg | Biochemical parameter- ALT |
| HBeAg/ Anti Hbe | Fibrosis marker- Non-invasive markers |
| HBV DNA | Elastography |
| | Liver biopsy |

Perinatal transmission- Mother and Sibs

For all first degree relatives and sexual partners of subjects with chronic HBV tested for- HBsAg, anti-HBs level, anti-HBc, anti HBe

To be **vaccinated** if they are negative for these markers

Healthcare workers

- HBV infection alone should not disqualify infected persons from the practice or study of surgery, dentistry, medicine or allied health fields.
- No clear clinical trial regarding transmission
- No HBV infection transmission reported if **HBV DNA is less than 200 IU/ml**

Risk of blood borne pathogens to HCWs after Needle Stick Injury (NSI) in Taiwan

- Duration- 1997-1998
- 18474 in-patients
- 1805 tested positive
 - HBsAg in 16.7%
 - Anti HCV in 12.7%
 - HIV in 0.8%
- 7550 NSI reported by 8645 HCW

Immunization status of HCWs in India : post vaccination

| Variables | <5 yrs (n=541) | >5 yrs (n=519) | >10 yrs (n=138) |
|---------------------------------------|----------------|----------------|-----------------|
| Category of HCWs | | | |
| Doctors (n) | 143 | 143 | 23 |
| Nurses (n) | 235 | 232 | 87 |
| Technicians(n) | 42 | 43 | - |
| Health care attendants(n) | 76 | 96 | 18 |
| Others (n) | 42 | 6 | 10 |
| Male:Female | 231:310 | 190:329 | 38:103 |
| Age (mean ±S.D) | 30.6±8.3 | 38.3±6.5 | 37.6±8.05 |
| Anti-HBs titers (median) | 172±(1-300) | 140±(1-300) | 17±(1-300) |
| Anti-HBs titers >10IU/ml(n) | 493 (91%) | 423 (81%) | 83 (60%) |
| Anti-HBs titers <10IU/ml(n) | 48 (9%) | 96 (18%) | 55 (40%) |

Pregnancy

- **Screening for HBsAg** in first trimester is strongly recommended
- Family planning should always be discussed with women of child bearing age
- In a women of child bearing age-
 - Without advanced fibrosis and planning a pregnancy in near future, delay therapy until the child is born
 - With advanced fibrosis, therapy with tenofovir is recommended

Patient undergoing immunosuppressive medication or chemotherapy

- Risk of HBV reactivation is high
- Check for **HBsAg+** or **HBsAg-/ anti-HBc+** status- Need treatment with NA
- Vaccination of HBV seronegative patient is recommended

Patient on Dialysis

- All dialysis patients to be screened for HBsAg/ anti-HBc status
- Seronegative patients should be vaccinated
- HbsAg-/ anti HBc+ patients do not need treatment nor prophylaxis and must be monitored for HBV markers

Screening of Chronic Hepatitis C

- Screening of HCV infection is based on the detection of anti-HCV antibodies
- If anti-HCV antibodies are detected, then HCV RNA should be determined to identify patients with on going infection
- Goal of treatment- achieving undetectable HCV RNA at 12 weeks and 24 weeks after treatment.

Who to test

- Patients who have received blood transfusion esp before 1992
- Patient on long term hemodialysis
- Exposures to HCV especially HCW
- Patient with sign and symptoms of liver disease
- High risk behaviour, IDU
- All persons with HIV infection
- Universal HCV screening not recommended in pregnancy

COUNSELING AND PREVENTION OF TRANSMISSION

Chronic HBV/ HCV Infected subjects *should not be discriminated and stigmatized.*

Thank You