

REFERENCES

- *Abdel-Naiem A, El-Akkad M, El-Gendy H, Wegdan A and Helal A. (1996):*
Hepatitis C viral infection and disease expression in chronic hepatitis. Egyptian J. Med. Microbiol; 5(1): 35-38.
- *Abdel-Wahab MF, Zakaria S, Kamel M, Abdel-Khaliq MK, et al. (1994):*
High seroprevalence of hepatitis C infection among risk group in Egypt. Am. J. Trop. Med. Hyg; 51: 563-567.
- *Abou-Elew HMM. (1996):*
Genotype heterogeneity of HCV. M.Sc. Thesis. Clinical and Chemical Pathology. Faculty of Med. Cairo Univ.
- *Ackerman Z, Valinluck B, Redeker AG, and Govindarajan S. (1992):*
Spontaneous exacerbation of disease activity in patients with chronic delta hepatitis infection: the role of hepatitis B,C or D. Hepatology; 16: 625-29.
- *Agha S, El-Gendy M, El-Fiky A, and El-Emshaty W. (1997):*
Serum HCV RNA titre, aminotransferases and liver histopathological findings in HCV seropositive cases. GCB; 21(10): Abst. 60.
- *Alberti A. and Realdi G. (1991):*
Parenterally-acquired non-A, non-B hepatitis. In: Oxford textbook of clinical hepatitis by McIntyre N, Benhamon JP, Bircher J, Rizzetto M and Rodes J (eds). Oxford Medical publication; P: 605-617 .

- Al-Bitar EAF. (1996):

An epidemiological study of hepatitis B and C among adults attending primary health care centers in Benha City. M.D. Thesis. Public Health. Benha Faculty of Med. Zagazig Univ.

- Aldershvile J, Frosner GG, and Nielson JO. (1980):

Hepatitis B e antigen and antibody measured by radioimmunoassay in acute hepatitis B surface antigen - positive hepatitis. J. Infect. Dis; 141: 293-298.

- Alexander GJM, Brahm J. and Fagan EA. (1987):

Loss of HBsAg with interferon therapy in chronic HBV infection. Lancet; 1: 66-68 .

- Allander T, Beyene A, Jacobson SH, Grillner L, and Persson MA. (1997):

Patients infected with the same HCV strain display different kinetics of the isolate - specific antibody response . J. Infect. Dis; 175: 26-31.

- Allander T, Gruber A, and Naghavi M, (1995):

Frequent patients to patients transmission of HCV in a haematology ward. Lancet ; 345 : 603 - 607 .

- Alter HJ, (1992):

New kit on the block : Evaluation of second - generation assays for detection of antibody to HCV. Hepatology; 15: 350-353.

- Alter HJ, Purcell RH, Holland PV, and Popper H. (1978):

Transmissible agent in non - A, non-B hepatitis. Lancet ; 1:459-463 .

- Alter HJ, Sanchez-Pescador R, Urdea MS, Wilber JC, et al. (1995):

Evaluation of branched DNA signal amplification for the detection of HCV RNA. *J. Viral Hepatitis*; 2: 121-132.

- Alter H.J., Tegtmeier G.E., Jett B.W., Bayer W.L. (1991):

The use of recombinant immunoblot assay in the interpretation of anti-hepatitis C virus reactivity among prospectively followed patients, implicated donors and random donors. *Transfusion*; 31:771-776.

- Alter MJ. (1991):

Epidemiology of community-acquired hepatitis C. In: *Viral hepatitis and liver diseases*. by Hollinger FB, Lemon SM, Margolis H (editors). Williams and Wilkins: 410-413.

- Alter MJ. (1995):

Epidemiology of hepatitis C in the West. *Semin. Liver. Dis*; 15: 5-14.

- Alter MJ, Coleman PJ and Alexander WJ. (1990):

Importance of heterosexual activity in the transmission of hepatitis B and non-A, non-B hepatitis. *JAMA*; 262: 1201.

- Alter MJ, Margolis HS, and Krawczynski K. (1992):

The natural history of community acquired hepatitis C in the United States. *N. Engl. J. Med*; 327: 1899-1905.

- *Altrmirano M., Delaney A., Wong A., Marostenmaki J., and David P. (1995):*

Identification of HCV genotypes among hospitalized patients in British Columbia, Canada. *J. Infect. Dis.*, 171:1034-1038 .

- *Andre FE. (1989):*

Summary of safety and efficacy data on a yeast-derived hepatitis B vaccine. *Am. J. Med*; 87 (suppl 3A): 14s - 20s .

- *Apichartpiyakul C, Chittivudikarn C, Miyajima H, Homma H and Hotta H. (1994):*

Analysis of HCV isolates among healthy blood donors and drug addicts in Chiang Mai, Thailand. *J. Clin . Microbiol*; 32: 2276- 2279.

- *Arankalle VA, Ticehurst J, and Sreenivasan MA. (1988):*

Aetiological association of a virus like particle with enterically, transmitted non- A, non-B hepatitis. *Lancet*; 1 : 550 - 554 .

- *Arthur RR, Hassan FN, Abdallah YM. (1997):*

Hepatitis C antibody prevalence in blood donors in different governorate in Egypt. *Transaction of the Royal Society of Tropical Medicine and Hygiene*; 91: 271-74.

- *Barany F. (1991):*

Genetic disease detection and DNA amplification using cloned thermostable ligase. *Proc. Natl. Acad. Sci. USA*; 88: 189-193.

- *Barin F, Denis F and Chotand J. (1980):*

Early asymptomatic hepatitis A in Senegalese children Lancet;
1 : 212 - 213 .

- *Bartenschlager R, Ahlborn-Laack L, Mous J, and Jacobsen H. (1994):*

Kinetic and structural analyses of hepatitis C virus polyprotein
processing. J. Virol; 68 :5045-5055 .

- *Bassily S, Hyams KC, El-Masry NA, Hassan NF, and Watt DM. (1992):*

HCV infection and hepatosplenic schistosomiasis. Scand. J. Infect.
Dis; 24:687-88 .

- *Battegay M. (1996):*

Immunity to hepatitis C virus: A further piece of the puzzle.
Hepatology; 24 (4): 961-963.

- *Battegay, M, Fikes J, Di-Bisceglie AM, Wentworth PA, Sette A, Celis E,
and Ching W. (1995):*

Patients with chronic hepatitis C have circulating cytotoxic T cells,
which recognise hepatitis C virus - encoded peptides binding to
HLA-A2. 2 molecules. J. Virol; 69: 2462-2470 .

- *Beld M, Penning M, McMorris M, and Goudsmit J. (1998):*

Different HCV RNA load profiles following seroconversion among
injecting drug users without correlation with HCV genotype and
serum alanine amino-transferase levels. J. Clin. Micro. 36(4):
872-77.

- *Belli LS., Ideo G., Silini E. (1996):*
Hepatitis G virus and post transplantation hepatitis New England Journal of Medicine; 335:1394-1395 .
- *Beloqui O, Prieto J, Suarez M, et al. (1993):*
N-acetyl cysteine enhances the response to IFN- α in chronic hepatitis C. J. Interferon Res; 13: 279-82.
- *Bertolini L, Iacovacci S, Ponzetto A, and Carloni G. (1993):*
The human bone-marrow-derived B-cell line C.E., susceptible to HCV infection. Res. Virol; 144: 281-285.
- *Bhattacharjee V, Prescott LE, Pike I, Bell H, et al. (1995):*
Use of NS4 peptides to identify type-specific antibody to HCV genotypes 1,2,3,4,5 and 6. J. Gen. Virol; 76: 1737-48.
- *Bjorkander J, Cunningham - Rundles C, and Lundin P. (1988) :*
Intravenous immunoglobulin prophylaxis causing liver damage in 16 of 77 patients with hypogammaglobulinemia. Am. J. Med. 84:107-11.
- *Bjoro K, Froland SS, Yun Z, Samdal -HH. (1994):*
Hepatitis C infection in patients with primary hypogammaglobulinemia after treatment with contaminated immunoglobulin. N. Eng. J. Med; 331(24): 1607-11 .
- *Blumberg BS, Alter HJ and Visnich S. (1965):*
A new antigen in leukemia serum . J. Am. Med. Ass; 66: 924-931.

- **Blumberg BS, Gersttey BJS, Hungerford, DA, London WT and Suntnick A. (1967):**
A serum antigen (Australia antigen) in Down's Syndrome, Leukemia and Hepatitis. *Ann. Int. Med*; 66: 924 - 31.
- **Bonkowsky HL, Banner BF and Rothman AL. (1997):**
Iron and chronic hepatitis C. *Hepatology*; 25: 759-68.
- **Bonino F, Heermann KH and Rizzetto M. (1986):**
Hepatitis delta virus protein composition of delta antigen and its HBV - derived envelope. *J. Virol*; 58 : 945 - 950 .
- **Boudart D, Lucas JC, Muller JY, and Harousseau JL. (1990):**
False positive HCV antibody tests in paraproteinaemia. *Lancet*; 1: 63.
- **Bowden DS, Moaven LD, and Locarnini SA (1996):**
New hepatitis virus: are there enough letters in the alphabet. *Med. J. Aust*; 164 (2): 87-9.
- **Bradley DW., Amynard JE and Popper H. (1983) :**
Post transfusion non-A non-B hepatitis: physicochemical properties of two distinct agents. *J. infect. Dis.* 148:254-265 .
- **Bradley DW, Beach MJ and Purdy MA. (1992):**
Recent developments in the molecular cloning and characterization of hepatitis C and E viruses . *Microbiol. pathogenesis*; 12: 391- 398.

- *Bradley DW, Cook EH and Maynard JE. (1979):*

Experimental infection of chimpanzees with antihemophilic (factor V111) materials: recovery of virus-like particles associated with non-A, non-B hepatitis J. Med. Virol; 3: 253-269.

- *Bradley DW and Maynard JE. (1986) :*

Etiology and natural history of post - transfusion non-A, non-B hepatitis. Smin. Livr. Dis, 6 : 56 - 66 .

- *Bradley DW, Maynard JE and Cook EH. (1980):*

Non-A, Non-B hepatitis in experimentally infected chimpanzees: Crosschallenge and electron microscopic studies
J. Med. Virol; 6:186- 201.

- *Bradley DW, Mc Caustland KA, Cook E.H. (1985):*

Post-transfusion non-A, non-B hepatitis in chimpanzees : phsicoc-
hemical evidence that the tubule-forming agent is a small enveloped
virus. Gastroentrology; 88 : 773 - 779 .

- *Bradley DW, Schable CA and Mc Caustland KA. (1984):*

Hepatitis A virus: growth characteristics of in vivo and in vitro
propagated wild and attenuated virus strains.
J. Med. Virol; 14: 373-386 .

- *Bradley DW, McCaustland K, Krawczynski K, Spelbring J. (1991):*

Hepatitis C virus: Buoyant density of the factor V111 - derived
isolate in sucrose. J. Med. Virol; 34 : 206 - 208 .

- *Brettler D, Mannucci P, Gringeri A, et al. (1992):*

The low risk of HCV transmission among sexual partners of hepatitis C infected hemophiliac males *Blood*; 80: 540-543.

- *Brown D and Dusheiko G. (1993):*

Diagnosis of hepatitis C. In viral hepatitis: Scientific basis and clinical management by Zuckerman AJ and Thomas HC (eds) Churchill Livingstone; P. 283-301 .

- *Bruno S, Silini E, Crosignani A, Brozio F, Leeandro G, and Bono F. (1997):*

Hepatitis C virus genotypes and risk of hepatocellular carcinoma in cirrhosis: A prospective study *Hepatology*; 25: 754 - 758 .

- *Buffet C, Charmaux N, Laurent Puig P, Chopineau S, et al. (1994):*

Enhanced detection of antibodies to HCV by use of a third-generation RIBA . *J. Med. Virol.*; 43 :259-261 .

- *Bukh J, Purcell RH, and Miller RH. (1992):*

Sequence analysis of the 5 non-coding region of hepatitis C virus . *Proc. Natl. Acad. Sci. USA*; 89 : 4942-4946 .

- *Busch MP. (1994):*

HIV and blood transfusions: Focus on seroconversion. *Vox. Sang.* 67, Suppl; 3: 13-18.

- *Byrnes JJ, Banks AT, Piatak M and Kim J. (1996) :*

Hepatitis G- associated aplastic anaemia. *Lancet*; 348 : 772 .

- *Candinas D, Joller - Jemelka HI, Schlumpf R and Wicki A. (1994):*

Hepatitis C RNA prevalence in a Western European organ donor pool and virus transmission by organ transplantation.

J. Med. Microbiol; 41:220-223 .

- *Carloni G, Iacovacci S and Sargiacomo M. (1993):*

Susceptibility of human liver cell cultures to HCV infection. Arch .

Virol; 128 (suppl 8) : 31-39.

- *Casteling A, Song E, Sim J, et al. (1998):*

GB virus C prevalence in blood donors and high risk groups for parenterally transmitted agents from Gauteng, South Africa.

J. Med. Virol; 55 : 103-108 .

- *Cayla JM, Bagard M, Barjonet G, et al. (1997):*

HCV serotyping in anti-HCV positive cases. International Conf. On Infect. Dis. and Public. Health. Alexandria, Egypt.

- *Cerino A, Cividini A, Asti M, Lanza A and Mondelli M. (1996):*

Comparative evaluation of two serologic typing methods for HCV.

J. Clin. Microbiol; 34 (3): 714-16.

- *Cha TA, Kolberg J, Irvine B, et al. (1991):*

Use of a signature nucleotide sequence of HCV for detection of viral RNA in human serum and plasma. J. Clin. Microbiol; 29: 2528-34.

- **Chan SW, Mc Omish F, Holmes EC, Dow B, et al. (1992) :**
 Analysis of a new HCV type and its phylogenetic relationship to existing variants. *J. Gen. Virol*; 73 (5): 1131-41 .

- **Chan TM, Lok AS, Cheng IK and Chan RT. (1993) :**
 Prevalence of hepatitis C virus infection in hemodialysis patients :
 A longitudinal study comparing the results of RNA and antibody assays, *Hepatology* ; 17: 5-8 .

- **Chang MF, Baker SC and Soe LH. (1988):**
 Human hepatitis delta antigen is a nuclear phosphoprotein with RNA binding activity. *J. Virol*; 62 : 2403-2410 .

- **Chau KH, Hargie MP and Decker, R.H. (1983):**
 Serodiagnosis of recent hepatitis B infection by IgM class anti - HBc *Hepatology*; 3: 142-149 .

- **Chayama K, Kobayashi M, Tsubota A and Kumada H. (1995):**
 Molecular analysis of intraspousal transmission of HCV.
J. Hepatol; 22: 431-39.

- **Chayama K, Tsubota A, Arasey, et al. (1993):**
 Genotypic subtyping of hepatitis C virus.
J. Gastroenterol. Hepatology; 8: 150-58.

- **Chazouilleres O, Kim M and Combs (1994):**
 Quantitation of hepatitis C virus RNA in liver transplant recipients
Gastroenterology; 106 : 994 - 999 .

- *Chen PJ, Lin MH, Tai KF and Liu PC. (1992):*

The Taiwanese hepatitis C virus genome : Sequence determination and mapping the 5' termini of viral genomic and antigenomic RNA. Virology; 188:102-133 .

- *Chen PJ, Wang T, Hwang LH, Yang YH, et al. (1992):*

Transient immunoglobulin M antibody response to HCV capsid antigen in posttransfusion hepatitis C.

Proc. Natl. Acad. Sci. USA; 89: 5971-75.

- *Chiaramonte M, Stroffolini T and Lorenzoni U. (1996):*

Risk factors in community acquired chronic hepatitis C virus infection: A case - control study in Italy. J. Hepatol; 24: 129-134 .

- *Choo Q-L , Kou G , Weiner AJ. Overby LT and Bradley DW. (1989):*

Isolation of a c DNA clone derived from a blood - borne non - A, non - B viral hepatitis genome. Science; 244 : 359 - 362 .

- *Choo QL, Kou G, Weiner A, Wang K and Overby L. (1992):*

Identification of the major, parenteral non-A, non-B hepatitis agent (hepatitis C virus) using a recombinant c DNA approach. Semin. liver Dis ; 12:279 -288.

- *Choo QL, Richman KH and Han J. (1991):*

Genetic organization and diversity of the hepatitis C virus. Proc. Natl. Acad. Sci. USA; 88 : 2451 - 2455 .

- *Chou Wen-Hsiang, Yoneyama T, Takeucki K, Harada H and Saito I. (1991):*

Discrimination of hepatitis C virus in liver tissues from different patients, with hepatitis carcinoma by direct nucleotide sequencing of amplified cDNA of the viral genome.

J. Clin. Microbid; 29:2860- 2864.

- *Chung RT and Kaplan LM. (1992):*

Isolation and characterization of an HCV-specific RNA- dependent RNA polymerase activity from extracts of infected liver disease. In Hepatitis C virus and related viruses Molecular virology and pathogenesis. by Houghton M., Bonino F. D'Aquino M. (eds): First annual meeting Venice, July. Abstract A 15, P: 21.

- *Cohn EJ, Oncley JL and Strong LE. (1944):*

Chemical, clinical and immunological studies on the production of human plasma fractionation. J. Clin. Invest; 23 : 417-432 .

- *Colombari R, Dhillon AP, Piazzol E and Tomba A. (1993):*

Chronic hepatitis in multiple virus infection: histopathological evaluation. Histopathology; 22: 319-325.

- *Conard EV, Gretch DR Obermeyer KR and Moog KMS. (1995):*

Transmission of the HCV by tissue transplantation. J. Bone. Joint. Surg. 77: 214-24 .

- *Conry-Cathilena C, Van Raden M, Gible J, Melpolder J and Shakil AO. (1996):*
Routes of infections, viraemia, and liver disease in blood donors found to have HCV infection. N. Engl. J. Med; 334 : 1691-96 .
- *Courouche AM, Bouchareau F, Girault C. (1994):*
Significance of NS3 and NS5 antigens in screening for antibody. Lancet; 343 :853 - 54 .
- *Cribier B, Schmitt C, Rey D, Kirn A and Stoll-Keller F. (1998):*
Production of cytokines in patients infected by HCV. J. Gen. Virol; 55: 89-91.
- *Cuthbert JA . (1994) :*
Hepatitis C:progress and problems. Clin. Microbiol. Rev; 7:505-532.
- *Dailey PJ, Collins ML, Urdea MS and Wilber JC. (1998):*
Quantification of HCV RNA in liver tissue by b DNA Assay. In: Methods in molecular medicine, Vol. 19: Hepatitis C protocols. Lau JYN (ed.) Humana Press. Inc. Totowa, New Jersey.
- *Damen M, Zaaijer HL, Cuypers HTH and Vrielink H. (1995):*
Reliability of the third - generation RIBA for HCV Transfusion. 36:745 - 749 .
- *Darwish NM, Abbas MO, Abdel Fattah FM and Darwish MA. (1992):*
HCV infection in blood donors in Egypt. J. Egypt pub Health, ASSXLVII: 3: 224-236.

- *Darwish MA, Faris R and Clemens JD. (1996):*

High seroprevalence of hepatitis A, B, C, and E viruses in the Nile Delta. *Am. J. Trop. Med. Hygiene*; 54 (6): 554-8.

- *Darwish MA, Raouf TA, Roushdy P, Constantine NT, Rao MA and Edelman L. (1993):*

Risk factors associated with a high seroprevalence of HCV infection in Egyptian blood donor. *Am J. Trop. Med. Hyg*; 49: 440 - 447 .

- *Davidson F and Simmonds P. (1998):*

Determination of HCV genotypes by RFLP. In: *Methods in molecular medicine, Vol. 19: Hepatitis C protocols*. Lau. JYN (ed). Humana Press. Inc., Totowa, New Jersey.

- *Davidson F, Simmonds P, Ferguson JC, Jarvis LM and Dow BC (1995):*

Survey of major genotypes and subtypes of HCV using restriction fragment length polymorphism of sequence amplified from the 5' non-coding region. *J. Gen. Virol*; 76: 1197-1204.

- *Davis GL and Lau JYN. (1995):*

Hepatitis C. In: *Bouckus Gastroenterology; 5th ed.* Haubrich WS, Schaffner F, and Berk JE. (eds). W.B. Saunders Company.
P: 2082-2114.

- *Davis LG, Weber DJ and Lemon SM. (1989):*

Horizontal transmission of HBV. *Lancet*; 1 : 889 .

- *Dawson GJ, Cabal CM, Chau KH and Yarbought P. (1992):*
Solid phase enzyme-linked immunoassay for HEV IgG and IgM class antibodies utilizing recombinant antigen and synthetic peptide.
J. Virol. Methods; 38 :175-186.
- *Dawson GJ, Schlauder GG, Pilot Matias TJ, et al. (1996):*
Prevalence of GBV - C infection using RT-PCR.
J. Med. Virol; 50:97-103 .
- *Decker R and Troonen H. (1997):*
Diagnosing hepatitis C: an overview In: Hepatitis C 1997 essays and expert opinions. by Decker R. and Troonen H. (eds). Abbott Diagnostics Division . USA. P: 69-76.
- *De Cock KM, Bradley DM and Sandford NL. (1987):*
Epidemic non-A, Non-B hepatitis in patients from Pakistan. Ann. Intern. Med; 106 : 227 - 230 .
- *Deinhard F and Gust ID. (1982):*
Viral hepatitis. Bull WHO; 60 : 661 - 691 .
- *Deleys R. (1993):*
Diagnosis of HCV infection using synthetic peptides. Current Opinion in Therapeutic Patients. 3: 545-560 .
- *Detmer J, Lagier R, Flynn J. and Zayati C. (1996) :*
Accurate quantification of HCV RNA from all HCV genotypes by using branched - DNA technology. J.Clin. Microbiol; 34(4): 901-907.

- Dhaliwal SK, Prescott LE and Dow BC. (1996):

Influence of viraemia and genotype upon Serological reactivity in screening assays for antibody to HCV. J.Med. Virol; 48: 184-190.

- Di Bisceglie A and Negro F. (1989):

Diagnosis of HDV infection . Hepatology; 10 : 1014 - 1016 .

- Dienstag JL. (1983):

Non-A, Non-B hepatitis: Experimental transmission putative virus agents and markers, and prevention Gastroenterology; 85:743-768 .

- Dienstag JL and Alteer HJ. (1986):

Non-A, Non-B hepatitis: Evolving, epidemiologic and clinical perspective. Semin. Liver Dis; 6 : 67-81 .

- Dienstag JL and Isselbacher KJ. (1994):

Acute hepatitis In: Harrison's principle of internal Medicine by Isselbacher KJ, Braunwald E, Wilson JD, Martin JB, Kasper DL (eds) McGraw-Hill Inc. 13th edition. P :1458-1477.

- Dienstag JL, Routenberg JA and Purcell RH. (1975):

Food handler-associated outbreak of hepatitis type A: An immune electron microscopic study. Ann. Intern. Med; 83 : 647 .

- Diepolder HM, Zachoval R, Hoffmann RM, Jung MC, et al. (1995):

Possible mechanism involving T-lymphocyte response to non-structural protein 3 in viral clearance in acute HCV infection.

Lancet; 346: 1006-7.

- *Dindazane J. (1992):*
Viral hepatitis:pre exposure and post exposure prophylaxis. Post. Grad. Med; 92 (4): 43-52 .
- *Dittman S, Roggendorf M, Durkop J and Lorbeer B. (1991) :*
Long - term persistence of hepatitis C virus antibodies in a single - source outbreak . J. Hepatol; 13 : 323 - 327 .
- *Dore G, Kaldor JM and Mc Caughan W. (1997);*
Systematic review of role of PCR in defining infectiousness among people infected with HCV. BJM; 315: 333-337.
- *Dow BC, Follet EAC, Jordon T, Mc Omish F, et al. (1994):*
Testing of blood donations for HCV. Lancet; 343: 477-78.
- *Dow BC, Munro H, Buchanan I, et al. (1996):*
Third generation recombinant immunoblot assay: Comparison of reactivities according to HCV genotype. Transfusion; 36: 546-51.
- *Doutrelapont JM, Alder M, Willem (1993) :*
Hepatitis C infection and membrano proliferative glomerulonephrits . Lancet; 341 : 317 .
- *Drew WL. (1993):*
Hepatitis Viruses. In Sherris Medical Microbiology 3 rd ed . by Ryan KJ (Editor) Prentice - Hall International. P : 491 - 494 .
- *Dusheiko GM. (1997):*
Hepatitis C infection: from virology to management. In: Hepatitis C 1997 essays and expert opinions by Decker R and Troonen H (eds.). Abbott Diagnostics Division USA. P: 5-25.

- *Dusheiko GM, Weiss HS, Brown D, Mcomosh F and Sherlock (1994):*

Hepatitis C virus genotypes: An investigation of type specific difference in geographic origin and disease Hepatology; 19 :13-18.

- *Eisenstein BI. (1990):*

The PCR: a new method of using molecular genetics for medical diagnosis. N. Eng. J. Med; 18: 178-83.

- *El-Boushara HG. (1998):*

Correlation between HCV genotypes and response to treatment with IF- α . M.D. Thesis . Medical Microbiology and Immunology. Faculty of Med. Cairo Univ.

- *El-Nasser MN. (1992):*

Intrafamilial transmission of HCV: A major mode of spread in Saudi-Arabia Population. Ann. Trop. Pedia; 12: 211-15.

- *El- Sayed NM, Gomatos PJ, Rodier - GR, Darwish A, Khashaba S and Arthur RR. (1996) :*

Seroprevalence survey of Egyptian Tourism workers for HBV HCV, HIV and Treponema pallidum infection: Association of HCV infection with specific regions of Egypt. Am. J. Trop. Med. Hyg; 55(2):179-184 .

- *El-Sahly AM, Nour El-Din MA, Abdel-Rahman H, et al. (1991):*

Prevalence of antibodies to HCV in Egyptian patients with Schistosomiasis. 9th Annual Meeting of Egyptian Soc. of Hepatology April 1991, Cairo.

- *Emerson SU, McRill C, - Rosenblum B, et al. (1991):*

Mutations responsible for adaptation of HAV to efficient growth in cell culture. J. Virol; 65: 4882-86.

- *Emmet B, Kent G and Benner M. (1993) :*

Hepatitis A through E: Distingwshing the etiologic agents. Modern Medicine of the Middle East . Vol 10 / August : 48-60 .

- *Esteban JL, Esteban R and Viladomiu (1989) :*

Hepatitis C virus antibodies among risk groups in Spain.
Lancet; 2 : 294 - 297.

- *Esteban JI, Genesca J and Alter HJ. (1992) :*

Molecular biology pathogenesis, epidemiology, clinical features, and prevension . In Progress in liver disease. by Boyer JI, and Ockner RK (eds) Vol. 10 Philadelphia W.B Saunders; P: 253 - 282 .

- *Esteban JI, Gomez J, Martell M, Cabot B, et al. (1996):*

Transmission of HCV by a cardiac surgeon.
N. Engl. J. Med; 334: 555-560.

- *Everhart JE , Di Bisceglie AM, Murray LM and Alter HJ. (1990) :*

Risk for non - A , Non- B hepatitis through sexual or household contact with chronic carriers . Ann : Intern. Med; 112 : 544 - 545 .

- *Eyster ME, Alter HJ, Aldort LM, et al. (1991):*

Heterosexual co-transmission of HCV and HIV. Annals of Internal Med.; 115: 764-67.

- *Fabrizi F, Lunghi G, Raffaele L and Guarnori I. (1997) :*

Serologic survey for control of hepatitis C in haemodialysis patients; Third generation assays and analysis of costs. *Nephrol Dial. Transplant*; 12: 298 - 303.

- *Failla C, Tomi L and De Francesco R. (1994):*

Both NS3 and NS4A are required for proteolytic processing of HCV nonstructural proteins. *J. Viral*; 68: 3753-3760.

- *Falk PM, Feig AS and Gitnick GL. (1987) :*

Transplantation of hepatitis B surface antigen positive bone marrow. *Transfusion*; 18: 242 - 243 .

- *Feinstone SM, Kapikian AZ, Purcell RH, et al. (1975):*

Transfusion-associated hepatitis not due to viral hepatitis type A or B. *N. Engl. J. Med*; 292: 767-70.

- *Feinstone SM, Mihalik KB, Kamimura T and Alter HJ. (1983) :*

Inactivation of HBV and non-A, non-B hepatitis by chloroform. *Infect. Immun*; 41 : 816 - 821 .

- *Feray C, Gigou M , Samuel D and Paradis V. (1995) :*

Influence of the genotypes of HCV on the severity of recurrent liver disease after liver transplantation. *Gastroenterology*; 108 :1088-96 .

- *Fiordalisi G, Zanella I, Mantero G et al. (1996) :*

High prevalence of GB virus C infection in a group of Italian patients with hepatitis of unknown etiology. *J. Infect. Dis*; 174 : 181-183 .

- *Fox SA, Lareu RR and Swanson NR. (1995):*

Rapid genotyping of HCV isolates by dideoxy fingerprinting.

J. Virol. Methods; 53: 1-9.

- *Fraci P, London WT, Wong DC, Davson GJ et al. (1992) :*

The natural history of infection with HCV in chimpanzees:

Comparison of serologic responses measured with first and second -
generation assays and relationship to HCV viremia.

J. Infect. Dis; 165: 1006 -11 .

- *Francis DP, Hadler SC and Prendergast TJ. (1984) :*

Occurrence of the hepatitis A, B and non-A, Non-B hepatitis in the
United States. Am. J. Med; 76 : 69 .

- *Frosner GG. (1991) :*

Hepatitis A virus In: Robert B test book of human virology 2nd
edition, Mosby year book. P : 489 .

- *Frosner GG., Papaevangelon and Buter R. (1989) :*

Antibodies against hepatitis A in different European countries . Am
J epidemiol; 110:70-76 .

- *Furione M, Gatti M, Sarasin A, et al. (1997):*

HCV genotyping: Comparison of three methods GCB; 21 (10):

Abst. 42.

- *Galle PR, Hofmann WJ, Walczak H, Schaller H and Stremmel W. (1995):*

Involvement of the CD 95 (Apo-1/Fas) receptor and ligand in liver
damage. J. Exp. Med ; 182 : 1223 - 1236.

- *Gane EJ, Naoumov NK, Qian KP and Mondelli MU. (1996) :*
A longitudinal analysis of HCV replication following liver transplantation. *Gastroenterology*; 110 : 167 - 77 .

- *Garson JA, Lenzi M and Ring C. (1991):*
Hepatitis C viraemia in adults with type 2 autoimmune hepatitis.
J. Med. Virol; 34: 223-226.

- *Gauss - Muller V, Lottspeich F and Deinhard F. (1986) :*
Characterization of HAV structural proteins. *Virol*; 155: 732-736.

- *Gerard C, Vaira D, Troonen H, Siquet J and Sondag D. (1996):*
Combination of serological markers to predict the presence or absence of viremia in HCV-seropositive blood donors.
Vox. Sang; 71: 58-60.

- *Genesca J, Vila J, Cordoba J and Sauleda S. (1995) :*
Hepatitis C virus infection in renal transplant recipients.
J. Hepatol; 22: 272 - 277 .

- *Gerberding JL. (1994) :*
Incidence and prevalence of human immunodeficiency virus, hepatitis B virus, hepatitis C virus and cytomegalovirus among health care personnel at risk for blood exposure *J. Infect. Dis*; 170 : 1410 - 1417 .

- *Gerberding JL. (1996):*
The infected health care provider. *N. Engl. J. Med*; 334: 594-595.

- *Gerlich W, Jeur N and Thomssen R. (1980) :*
 Diagnosis of acute and inapparent HBV infection by measurement of IgM anti - HBc J. Infect. Dis; 142 : 54 - 101 .
- *Ghany MG, Chan TM, Urdea M and Lok AS. (1996):*
 Correlation between serum HCV RNA and aminotransferase levels in patients with chronic HCV infection.
 Dig. Dis. Sci; 41(11): 2213-18.
- *Giannini C, Thiers V, Nousbaum JB, et al. (1994):*
 Comparative analysis of the HCV core PCR and LiPA genotyping assays. J. Hepatol; 23: 246-53.
- *Gilli P, Siffritti S and Badani PL. (1995) :*
 Prevention of hepatitis C virus in dialysis units .
 Nephron; 70 : 301-306.
- *Girelli CM, Mirata C, Lesinigo E and Casiraghi A. (1995):*
 Iron overload and response to IFN- α in chronic hepatitis C.
 Am. J. Gastroenterol; 90: 170-171.
- *Gitlin N. (1997):*
 Hepatitis C: Risk of a haircut. Ann. Intern. Med; 126(5): 410-411.
- *Gocke DJ. (1972):*
 A prospective study of post- transfusion hepatitis. The role of Australia antigen. JAMA; 219 : 1165 - 1170 .

- *Goffin E, Pirson Y, Cornu C and Jadoul M. (1994):*

Significance of NS3 and NS5 antigens in screening for HCV antibody. *Lancet*; 343: 854.

- *Gold smith R, Yarbough PO and Reyes G. (1992) :*

Acute sporadic hepatitis E infection in Egyptian children diagnosed by IgM and IgG ELISA. *Lancet*; 339 : 338 - 331 .

- *Gonzalez A, Esteban JI, Madoz and Viladomiu L. (1995 b):*

Efficacy of screening donors for antibodies to the HCV to prevent transfusion - associated hepatitis . *Hepatology*; 22: 439-45.

- *Gonzalez S, Navas S, Castillo I and Carreno V. (1995 a):*

Hepatitis B and D genomes in hepatitis B surface antigen negative patients with chronic hepatitis C. *J. Med. Virol*; 45: 168-173.

- *Grob PJ, and Pontisso P. (1997):*

Does the healthy carrier of HCV exist. In: *Hepatitis C 1997 essays and expert opinions* by Decker R and Troonen H (eds). Abbot Diagnostics Division, USA. P: 49-63.

- *Gordon SC, Elloway RS, Long JC and Dmuchowski CF. (1993):*

The pathology of hepatitis C as a function of mode of transmission: blood transfusion Vs. intravenous drug use. *Hepatology*; 18: 1338-43.

- *Gross JB, Brandhagen DJ, Gossard AA, Douglas DD, et al. (1998):*

Daily, interferon to suppress HCV viremia among interferon non-responders. American Association for the study of Liver Diseases, 49th Annual Meeting. Chicago, Illinois. November 1998: Abstract 1.

- *Guatelli JC, Whitfield KM, Kwoh DY, et al. (1990):*

Isothermal, in vitro amplification of nucleic acids by a multienzyme reaction modeled after retroviral replication. Proc. Natl. Acad. Sci. USA; 87: 1874-78.

- *Gurakar A, Fagioli S, Wright H and Van Thiel DH. (1993):*

HCV infection: When to suspect, how to detect.
J. Crit. Illness; 8(12): 12 1287-95.

- *Gust ED, Lehmann NL and Dimitrikakis MA. (1979) :*

A seroepidemiologic study of infection with HAV and HBV in five Pacific Islands. Am. J. Epidemiol; 110 : 237 - 242 .

- *Gust ED and Purcell RH. (1989):*

Water borne Non A, non-B, hepatitis. J. Infec. Dis; 156: 630-35.

- *Gutekunst KA, Spadro JP, Dargon EA and Rosenstraus M. (1998):*

The AMPLICOR HCV tests for the detection and Quantitation of serum or plasma HCV RNA. In: Methods in molecular medicine, Vol. 19: Hepatitis C Protocols. by Lau JNY (ed). Humana Press Inc., Totowa, New Jersey P. 55-69.

- *Han JH, Shyamala V, Richman KH, Brauer MJ. (1991) :*

Characterization of the terminal regions of HCV RNA: Identification of conserved sequences in the 5 untranslated region and poly (A) tails at the 3' (end) Proc. Natl. Acad. Sci. USA; 88 : 1711-1715.

- *Hany M, Rayan A, Webster AD. (1991) :*

Long term safety and tolerability of intravenous immunoglobulin .
Lancet; 338 : 194 - 195 .

- *Harris K, Halet T and Teo CG. (1997):*

Extent of infection with multiple HCV genotypes. Gastroenterol
Clin. Biol; 21(10): Abst. 47.

- *Haris RJ, Gowans E and lanser J. (1996):*

Nucleic acid techniques in diagnostic microbiology. In: Mackie and
McCartney Practical Medical Microbiology. 14th ed. by Colle JG,
Fraser AG, Marmion BP, Simmons A (eds). Churchill Livingstone;
P. 205-242.

- *Hashimoto M, Chayama K, Tsubota A, Arase Y, et al. (1996):*

Typing 6 major HCV genoty, pes by PCR using primers derived
from nucleotide sequences of the NS5 region. Int. Hepatol.
Commun; 4: 263-67.

- *Hatzakis A, Hadziyannis S. (1984) :*

Sex - related differences in immunoglobulin M and total antibody
response to hepatitis A observed in two epidemics of hepatitis A.
Am. J. Epidemiol; 120 : 936 - 942 .

- *Hawkins A, Davidson F and Simmonds P. (1997):*

Comparison of plasma virus load amongst individuals infected with
HCV genotypes 1,2 and 3 using Quantiplex HCV RNA Assay
version 1 and 2, Roche Monitor and an in-house limiting difution
method.

J. Clin. Microbiol; 35: 187-192.

- *Healey CL, Sabharwal NK, Daub J and Davidson F. (1996) :*
 Outbreak of acute hepatitis C following the use of anti-hepatitis C virus - screened intravenous immunoglobulin therapy.
 Gastroenterology; 110: 1120 - 1126 .

- *He LF, Alling D, Popkin T, Alter HJ and Purcell RH. (1987):*
 Determining the size of non-A, non-B hepatitis by filtration. J. Infect. Dis; 31: 103-168.

- *He LF, Ford E, Purcell RH, et al. (1989):*
 The size of the hepatitis delta agent. J. Med. Virol; 27: 31-33.

- *Hijikata M, Kato N, Ootsuyama Y and Shimotohno K. (1991):*
 Gene mapping of the putative structural region of the the HCV genome by in vitro processing analysis. Proc. Natl. Acad. Sci. USA; 88: 5547-51.

- *Hijikatata M and Mishiro S. (1996) :*
 Circulating immune complex that contain HCV but not GBV-C in co - infected hosts . International hepatitis communication; 5: 339-344 .

- *Hijikata M, Mizushima H, Akagi T, Mori S, et al. (1993) :*
 Two distinct proteinase activities required for the processing a putative nonstructural precursor proteins of HCV.
 J. Virol; 67: 665- 75.

- *Hiramatsu N, Hayashi N, Katayama K, Mochizuki K and Kawanishi Y. (1994):*

Immunohistochemical detection of Fas antigen in liver tissue of patients with chronic hepatitis C. *Hepatology*; 19: 1354-1359 .

- *Hiroishi K, Kita H, Kojima M, Okamoto H, et al. (1997):*

Cytotoxic Tlymphocyte response and viral load in HCV infection. *Hepatology*; 25: 705-712.

- *Hodinka RL. (1998):*

Detection of HCV RNA in Serum by RT-PCR and radiolabeled liquid hybridization. In: *Methods in molecular medicine*, Vol. 19: *Hepatitis C protocols*. Lau JYN (ed.) Humana Press Inc., Totowa, New Jersey.

- *Hollinger FB, Mosley JW and Szmuness W. (1986):*

Transfusion-transmitted viruses study : experimental evidence for two non-A, non-B, hepatitis agents. *J. Infect. Dis*; 142: 400-407.

- *Honda M, Saneko S, Unoura M, Kobayshi K and Murakami S. (1993) :*

Risk of HCV infection through household contact with chronic carrier : Analysis of nucleotide sequence. *Hepatology*; 17 : 971 : 676 .

- *Hoofnagle JH. (1993) :*

Treatment of HCV. In *Viral Hepatitis Scientific Basis and Clinical Management* by Zuckerman AJ and Thomas HC (eds) Churchill Livingstone. P : 303 - 312 .

- *Hoofnagle JH. (1995) :*

Hepatitis B. In: *Bouckus Gastroenterology*. 5th ed Haubrich WS et al., (editors) W.B. Saunders Company; P : 2062 - 2079 .

- *Hoofnagle JH and Di Bisceglue AM. (1997):*

The treatment of chronic viral hepatitis N. Engl. J. Med; 336: 347-56.

- *Houghton M. (1996):*

Hepatitis C viruses. In: Fields Virology, 3rd ed. by Fields BN, Knipe DM, Howley PM, et al., (eds). Lippincott - Raven Publisher, Philadelphia; P: 1035-58.

- *Houghton M, Weiner A and Han J. (1991) :*

Molecular biology of the hepatitis C virus : implication for diagnosis, development and control of viral disease. Hepatology ; 14: 381-388.

- *Huang YY, Yang SS and Wu CH. (1994):*

Impact of screening blood donors for hepatitis C antibody on posttransfusion hepatitis. Transfusion; 34: 661-65.

- *Hu K-Q, YU CH and Vierling JM. (1992):*

Direct detection of circulating HCV RNA using probes from the 5'- untranslated region. J. Clin. Invest; 89: 2040-45.

- *Hyams KC, Purdy MA and Kaur M. (1992) :*

Acute spordic hepatitis E in Sudanese children: Analysis based on a new Western blot assay. J. Infect Dis; 165 : 1001 - 1005 .

- *Iacovacci S, Manzin A, Barca S, Sargiacomo M and Valli MB. (1997):*

Molecular characterization and dynamics of hepatitis C virus replication in human fetal hepatocytes infected in vitro Hepatology; 26 (5): 1328 - 1337.

- *Idrovo V, Dailey PJ, Jeffers L and Alvarez L. (1996):*

HCV RNA quantification in right and left lobes of the liver in patients with chronic hepatitis C. J. Viral. Hepatitis; 3: 239-49.

- *Inchauspe G. (1996) :*

Protection and defence mechanisms in HCV infection .

Nephrol. Dial. Transplant; 11 suppl 4:6-8 .

- *Ingelfinger JA, Mosteller FM, Thibodeau LA and Ware JH. (1994):*

Biostatistics in Clinical Medicine. McGraw-Hill. Inc; New York.

- *Innis MA and Gelfand DH. (1990):*

Optimization of PCR. In: PCR protocols: A guide to methods and applications. By Innis MA, Gelfand DH, Sninsky JJ and White IJ (eds). Academic Press New York. P: 3-12.

- *Jackson DR, Tabor E and Gerety RJ. (1979):*

Acute non-A, non-B, hepatitis: specific ultrastructural alterations in endo-plasmic reticulum of infected hepatocytes. Lancet; 1: 1249-50.

- *Jackson DP, Hayden JD and Quirke P. (1994):*

Extraction of nucleic acid from fresh and archival material . In: PCR protocols: A practical approach. By Mc Pherson MJ, Quirke P, and Taylor GR (eds). Oxford University Press, New York, P: 46-49.

- *Jansen RW, Siegl G. and Lemon SM. (1990) :*

Molecular epidemiology of human HAV defined by a antigen - capture polymerase chain reaction method. Proc. Natl. Acad. Sci. USA; 87 : 2867.

- *Jeannel D, Fretz C, Traore Y. and Kohdjo N. (1998):*
Evidence for high genetic diversity and long-term endemicity of HCV genotype 1 and 2 in West Africa. J. Med. Virol; 55 : 92 - 97 .
- *Johnson RJ, Wilson R, Yamabe H and Couser W. (1994) :*
Renal manifestation of HCV infection . Kidney Int; 46 :1255- 1263.
- *Jules L and Kurt J. (1994) :*
Acute hepatitis In : Harrison's Principles of internal medicine. 13 ed. Kurt J. et al.(editors) Mc Grow Hill. P: 1458-1482.
- *Kaito M, Watanabe S, Tsukixama-Kohara K, Yamaguchi K. et al. (1994) :*
HCV particles detected by immunoelectron microscopic study. J. Gen. Virol; 75 : 1755 - 60 .
- *Kamel MA, Gaffar YA and Wasef MA. (1992):*
High HCV prevalence in Egyptian blood donors. Lancet; 340:427.
- *Kaneko S, Miller RH and Di Bisceglie AM. (1990) :*
Detection of HBV DNA in serum by polymerase chain reaction . Application to clinical diagnosis, Gastroenterology; 99 : 799 - 804 .
- *Kao JH, Chen PJ and Chen DS. (1996) :*
Mechanism of vertical transmission of hepatitis G. Lancet 347:120.
- *Kao JH, Lai MY, Huang YT, et al. (1996):*
Chronic hepatitis C without anti-hepatitis C antibodies by second generation assay. Dig. Dis. Sci; 41: 161-165.

- *Karnel MA, Miller FD, El-Masry AG, Zakaria S, Khattab M, Essmat G and Ghaffar YA. (1994) :*

The epidemiology of *Schistosoma mansoni*, HBV and HCV infection in Egypt . Ann. Trop. Med. Parasitol; 88: 501- 509 .

- *Katayama T, Mazda T, Kikuchi S, Harada S, et al. (1992):*

Improved serodiagnosis of non-A, non-B hepatitis by an assay detecting antibody to HCV core antigen. Hepatology; 15: 391-94.

- *Kato N, Hijikata M, Ootsuyama Y, et al. (1990):*

Molecular cloning of the human HCV genome from Japanese patients with non-A, non-B, hepatitis. Proc. Natl. Acad. Sci. USA; 87:95 24-28

- *Kato N, Sekiya H, Ootsuyama Y, Nakazawa T, Hijikata M. (1993) :*

Humoral immune response to hypervariable region 1 of the putative envelope glycoprotein (gp70) of HCV. Journal of Virology; 67 : 3923 - 30.

- *Kato T, Mizokami M, Nakano T, et al. (1998) :*

Heterogeneity in E2 region of GBV - C / hepatitis G virus and hepatitis C. J. Med. Viral; 55 : 109 - 117 .

- *Khakoo SI, Soni PN, Savage K, Brown D and Dhillon AP. (1997) :*

Lymphocyte and macrophage phenotype in chronic hepatitis C. infection : Correlation with disease activity. Am. J. Pathol; 150 (3) : 963 - 970 .

- *Khorana HG, Klepper K, Ohstuka E and Molineux L. (1971):*

Journal of Molecular Biology; 56: 341. Quoted from PCR: A practical approach. By Mc Pherson MJ, Quirke P, Taylor GR (eds). IRL Press at Oxford University Press, Oxford (1992).

- *Khorana HG and Panet A. (1974):*

Journal of Biological Chemistry; 249:5213-21. Quoted from PCR: A practical approach. by McPherson MJ, Quirke P, Taylor-GR (eds). IRL Press at Oxford University Press, Oxford (1992).

- *Kim DW, Kim J, Gwack Y, Han JH and Choe J. (1997) :*

Mutational analysis of the hepatitis C virus helicase. Journal of Virology; 71(12) : 9400 - 9409 .

- *Kinoshita K, Miyake K, Nakao H, et al. (1997) :*

Molecular investigation of GB virus C infection in hemophiliacs in Japan. J. infect. Dis; 175 : 454 - 7.

- *Kita H, Hiroishi K, Moriyama T, Kaneko T, and Imawari M. (1995):*

A minimal and optimal cytotoxic T-cell epitope within HCV nucleoprotein. J. Gen. Virol; 76: 3189-93.

- *Klein RS, Freeman K, Taylor PE and Stevens CE. (1991) :*

Occupational risk for hepatitis C virus infection among New - York city, dentists. Lancet; 338 : 1539 - 1542 .

- *Knapp RG, and Miller MC. (1992):*

Clinical Epidemiology and Biostatistics, Harwal Publishing Co., Pennsylvanai.

- *Koa HW, Ashcavai M and Redeker AG. (1984) :*

persistence of hepatitis IgM antibody after acute clinical hepatitis
A. Hepatology; 4 : 933 - 936 .

- *Kobayashi M, Tanka E, Sodeyama T, Urushihara A, Mastsumoto A and Kiyosawak (1996) :*

The natural cases of chronic hepatitis C: A comparison between patients with genotypes 1 and 2 hepatitis C virus. Hepatol; 23: 695-699.

- *Kodama T, Jchiyama S, Sato K, Nada T and Nakashima N. (1998) :*

Evaluation of membrane filter assay system, Ortho HCV Ab Quik Pack for detection of anti - HCV antibody.
J. Clin. Microbiol; 36 (5): 1439 - 40 .

- *Koff RS. (1978) :*

Non - A, non - B viral hepatitis. In Koff RS, (ed) Viral Hepatitis
New York John Wiley and Sons; P: 35 - 42 .

- *Kojima M, Osuga T, Tsuda F, Okamoto H and Tanaka T. (1994):*

Influence of antibodies to the hypervariable region of E2/NS1 glycoprotein on the selective replication of HCV in chimpanzees.
Virology; 204: 665-72.

- *Koonin EV. (1991) :*

The phylogeny of RNA - dependent RNA polymerases of positive strand RNA viruses. J. Gen. Virol; 72 : 2197 - 2206 .

- *Koskinas J, Tibbs C, Saleh MG, Pereira L, McFarlane IC. (1995) :*
Effects of ribavirin on intrahepatic and extrahepatic expression of HCV in interferon non - responsive patients. J. Med. Virol; 45: 29-34.

- *Koziel MJ, Darryll D, Afdhal N, Choo Q.L Houghton M, Ralston R and Walker BD. (1993) :*
HCV - specific cytotoxic T lymphocytes recognize epitopes in the core and envelope proteins of HCV. J. Virol; 67 : 7522 - 7532 .

- *Koziel MJ, Dudley D, Afdhal N, Rice CM, et al. (1995):*
HLA class I-restricted cytotoxic T lymphocytes specific for HCV. J. Clin. Invest; 96: 2311-21.

- *Kraachristos A, Linardopoulos S, Ergazaki M and Spandios DA. (1995):*
Detection and analysis of HCV by a combined Rt-PCR. J. Med. Microbiol; 42: 367-71.

- *Krajden M, Zhao J, Bourke C, Scolia V, Gill P and Lau W. (1996) :*
Detection of HCV by PCR in second - generation enzyme immunoassay - seropositive blood donors by using matched pairs of fresh frozen plasma and pilot tube sera. J. Clin. Microbiol; 34(9): 2191 - 2195 .

- *Krawczynski K. (1993) :*
Hepatitis E virus . Hepatology ; 17:932 - 941 .

- *Krawczynski K. (1995) :*
Hepatitis E . In : Bouckus gastroenterology 5th ed . Haubrich WS et al. (editors), W.B . Saunders Company; P: 2129 - 2138 .

- *Krawczynski K, Alter MJ and Tankersley DL. (1996) :*

Effect of immune globulin on the prevention of experimental HCV infection. *J. Infect. Dis*; 174: 105-107.

- *Krawczynski K and Bradley DW. (1989) :*

Enterically transmitted non - A, non - B hepatitis : Identification of virus associated antigen in experimentally infected cynomolgus macaques *J. Infect. Dis*; 159 : 1042 - 1047 .

- *Krogsgaard K, Kryger P and Aldershvile J. (1985) :*

Hepatitis B virus DNA in serum from patients with acute hepatitis B *Hepatology*; 5 : 10 - 13 .

- *Kuhns MC. (1990) :*

Monitoring hepatitis B virus replication. *J. Hepatol*; 11 (supp 11): 590 - 594 .

- *Kumar Y, Cheng D, Thomas H, Monjardino J. (1992) :*

Cloning and sequencing of structural region and expression of putative core gene of HCV from a British case of chronic sporadic hepatitis. *J. Gen. Virol*; 73: 1521 - 25 .

- *Kuo G, Choo QL, Alter HJ, Gitnick GL, et al. (1989) .*

An major etiologic virus of human non - A non - B hepatitis. *Science*; 244 : 362 - 364 .

- *Kurosaki M, Enomoto N, Murakami T, et al. (1997):*

Analysis of genotypes and amino acid residue 209 to 248 of the NS5a region of HCV in relation to the response to interferon therapy. *Hepatology*; 25: 450-53.

- *Lam JPH, Mc Omish F, Burns SM, Yap PL, Mok JYQ, and Simmonds P. (1992) :*

Infrequent vertical transmission of HCV J. Infect. Dis; 167: 572-6.

- *Lamberti E, Cariani A, Bettinardi A, et al. (1991);*

An immunoassay for specific amplified HCV sequence. J. Virol Meth; 34: 238-243.

- *Lau JYN, Davis GL, Prescott LE. (1996);*

Distribution of HCV genotypes determined by line probe assay in patients with chronic hepatitis C seen at tertiary referral centers in the United States. Ann. Intern. Med; 124: 868-76.

- *Lau JWN, Mizokami, M and Kolberg JA. (1995) :*

Application of Six hepatitis C virus genotyping systems to sera from chronic hepatitis C patients in the United. States. J. Infect. Dis; 171:281 - 289.

- *Lechmann M, Inlenfeldt HG, Giers G, Jung G and Matz B. (1996);*

T-and B-cell responses to different HCV antigens in patients with chronic hepatitis C infection and in healthy anti-HCV-positive blood donors without viremia. Hepatology; 24: 790-795.

- *Lee SD, Hwang SJ, Lu RH, Lai KH and Lo KJ. (1991);*

Antibodies to HCV in prospectively followed patients with post-transfusion hepatitis. J. Infect Dis; 163: 1354-57.

- *Lee SR, Wood CL, Lane MJ, et al. (1995);*

Increased detection of HCV infection in commercial plasma donors by a third-generation screening assay. Transfusion; 35: 845-49.

- *Lefkowitz JH, Schiff ER and Davis GL. (1993):*

Pathological diagnosis of chronic hepatitis C. *Gastroenterology*; 104: 595-603.

- *Lenzi M, Johnson PJ and Mc Farlane IG. (1991) :*

Antibodies to HCV in autoimmune liver disease: Evidence of geographical heterogeneity. *Lancet*; 338 : 277 - 280 .

- *Lesniewski RR , Boardway KM, Casey JH Desai SM, et al. (1993) :*

Hypervariable 5'- terminus of HCV E2/NS1 encodes antigenically distinct variants. *J. Med. Virol* ; 40: 150 - 156 .

- *Lesniewski R, Okasinski G, Carrick R, et al. (1995):*

Antibody to HCV second envelope (HCV-E2) glycoprotein. *J. Med. Virol*; 45: 415-422.

- *Liang TJ, Jeffers L, Reddy RK, Silva MO. (1993) :*

Fulminant or subfulminant non - A, non - B viral hepatitis : The role of hepatitis C and E viruses . *Gastroenterology*; 104 : 554 - 562 .

- *Liao MJ, Lee N, Dipaola M, Hussain M, et al. (1994):*

Distribution of interferon- α 2 genes in humans. *J. of Interferon Research*, 14: 183-185.

- *Liaw YF. (1995):*

Role of hepatitis C virus in dual and triple hepatitis virus infection. *Hepatology*; 22: 1101-1108.

- *Liaw YF, Yang CY and Chu CM. (1986) :*

Appearance and persistence of hepatitis A IgM antibody in acute clinical hepatitis A observed in an outbreak. *Infection*; 14: 156-158 .

- *Lin C, Lindenbach BD, Pragai B and Rice CM, (1994):*

Processing of the HCV E2-NS2 region: identification of P7 and two distinct E2-specific product with different C termini.

J. Virol; 68: 5063-5073.

- *Lin HH, Kao JH and Hsu HY. (1994) :*

Possible role of high titer maternal viremia in perinatal transmission of hepatitis C virus. J. infect. Dis; 169 : 638 - 641 .

- *Linnen J, Wages JR, Zang - Keck ZY, et al. (1996) :*

Molecular cloning and disease association of hepatitis G virus : A transfusion transmissible agent. Science; 271 : 505 - 8 .

- *Liou TC, Chang TT, Young KC and Lin XZ. (1992):*

Detection of HCV RNA in saliva urine, seminal fluid and ascities. J. Med. Virol; 37: 197 - 202 .

- *Locarnini SA, Garland SM and Lehman NI. (1978) :*

Solid - phase enzyme linked immunosorbent assay for detection of HAV. J. Clin. Microbiol; 8: 277 - 282 .

- *Lohr HF, Elste C, Dienes HP, Michel G, Braun H-B and Gerken G. (1996) :*

The quantitative humoral immune response to the hepatitis C virus related to disease activity and the out come from therapy. J. Hepatol; 25 : 292 - 300.

- Lohr HF, Gerken G, Schlicht HJ and Fleischer B. (1993) :

Low frequency of cytotoxic liver infiltrating T lymphocytes specific for endogenously processed surface and core proteins in chronic hepatitis B. *J. Infect. Dis*; 165 : 1133 - 39 .

- Lohr HF, Nagel C, Dienes HP, Simpson B and Michel G. (1994) :

Significance of IgG and IgM anti - HCV antibody secretion in vitro in patients with chronic hepatitis C : Correlation to disease activity and response to interferon - α . *Hepatology*; 20: 1383 - 1389 .

- Lohr HF, Schlaak JF, Kollmannsperger S and Greken G. (1995) :

Liver infiltrating and peripheral blood T cell in chronic hepatitis C: immunodominant epitopes HLA-restriction and functional significance *Liver*; 24 : 172 - 184 .

- Longer CF, Denny SL, Caudill JD Miele TA. (1993):

Experimental hepatitis E: pathogenesis in *Cynomolgus* macaques. *J. Infect. Dis*; 168: 602-609.

- Lurie Y, Esteban R, Stalgis C, et al. (1998):

Daily therapy for 12 weeks with IFN- α 2b and ribavirin in non-responders with HCV-RNA genotype 1. American Association for the study of liver diseases, 49th Annual Meeting Chicago, Illinois. November 1998. Abst. 489.

- Lutwick (1991) :

Hepatitis B virus, In: Robert B Text book of human virology 2nd ed . Mosby year book; P: 515 - 660 .

- *Macagno S, Smedile A and Caredda F. (1990) :*

Monomeric (7S) immunoglobulin M antibodies to HDV in hepatitis type D. Gastroenterology; 89 : 1582 - 1586 .

- *Machida A, Ohnuma H, Tsuda F, Tanaka T and Mishiro S. (1992):*

Two distinct subtypes of HCV defined by antibodies directed to the putative core protein. Hepatology; 16: 886-91.

- *Mac Quarrie MB, Forghani B and Wolochow DA. (1984) :*

Hepatitis B transmission by human bite JAMA ; 230 : 732 - 742 .

- *Maertens G and Stuyver L. (1997):*

Hepatitis C virus geno-and serotypes: typing methods and clinical application In: Hepatitis C 1997 essays and expert opinions. by Decker R and Troonen H (eds). Abbott Diagnostics Division. USA. P: 107-115.

- *Maertens G and Stuyver L. (1998):*

HCV genotyping by the line Probe Assay. Inmo-Lipa HCV II. In: Methods in molecular medicine Vol. 19: Hepatitis C Protocols. Lau JYN (ed.) Humana Press. Inc. Totowa, New Jersey. P: 183-198.

- *Mahaney K, Tesechi V, Maertens G, et al. (1994):*

Genotypic analysis of HCV in American patients. Hepatology; 20: 1405-11.

- *Manabe S, Fuke I and Tanishita O. (1994):*

Production of nonstructural proteins of HCV requires a putative viral protease encoded by NS3. Virology; 198: 636-644.

- **Mandell GL, Bennett JE and Dolin R. (1995) :**

Acute viral hepatitis. In Mandell, Douglas and Bennett's Principles and Practice of Infectious Diseases fourth edition. Churchill Livingstone; P : 1141 - 1144 .

- **Mansell CJ and Locarnini SA. (1995):**

Epidemiology of hepatitis C in the East. Semin Liver Dis; 15: 15-32.

- **Manzini P, Saraco G, Cerchier A, Riva C. (1995) :**

HIV infection as risk factor for mother to child HCV transmission. Hepatol; 21 : 328 - 32 .

- **Marcellin P, Martinot Peignoux M, Boyer N, et al. (1991):**

Second generation (RIBA) test in diagnosis of chronic hepatitis C. Lancet, 337 : 551 - 552 .

- **Marshall RL, Laffler TG and Morgan RL. (1994) :**

Detection of HCV RNA by the asymmetric gap ligase chain reaction In PCR Methods and Application Cold Spring Hardor Laboratory Press. P. 80-84 .

- **Martell M, Esteban JI and Quer J. (1992):**

HCV circulates as a population of different but closely related genomes: quasispecies nature of the HCV genome distribution.

J. Virol; 66: 3225-3229.

- *Martin P. (1995):*

Hepatitis C genotypes: The key to pathogenicity. Ann. Intern. Med; 122(3) : 227 - 228 .

- *Martin P, Fabrizi F, Dixit V, Quan S, et al. (1998) :*

Automated RIBA HCV strip immunoblot assay for reproducible HCV diagnosis . J. Clin. Microbiol; 36(2) 367- 390 .

- *Mastromatteo AM, Rapaccini GL, Ursino S, Capelli G, et al. (1996):*

Other biological fluids than blood may be responsible of intrafamilial spread of HCV infection. Hepatology; 24 (4): 152.

- *Masuko K, Mitsui T, Iwano K, Yamazaki C, et al. (1996):*

Infection with hepatitis GB virus C in patients on maintenance hemodialysis. N. Eng. J. Med; 334 : 1485 - 90 .

- *Mattson L, Soonnerborg A and Weiland O. (1993):*

Outcome of acute symptomatic NANBH: A 13-years follow-up\study of hepatitis C virus markers. Liver; 13: 274 - 278 .

- *Mauser-Bunschoten EP, Bresters D, van Diremmelen AA and Roosendaal G. (1995) :*

Hepatitis C infection and viremia in Dutch hemophilia patients. J. Med. Virol; 45 : 241 - 256 .

- *Mayons MV, Hall AJ and Inskip HM. (1990) :*

Risk factors for transmission of HBV to gambion children. Lancet; 336 : 1107 .

- *McCallum FO, Mc Farlen AM, Miles JA, Pollock MR and Wilson C, (1951):*
 Infective hepatitis. Studies in East Anglia during the period 1943-47 Special Reports Ser Medical Research Council; P: 273 .

- *Mc Comish F, Yap PL, Dow BC, et al. (1994) :*
 Geographical distribution of HCV genotype in blood donors: An international collaborative survey. J. Clin. Microbiol; 32 : 884 - 92 .

- *McHutchinson JG, Person JL, Gore T, Lee SR, et al. (1992):*
 Improved detection of HCV antibodies in-high risk populations. Hepatology; 15: 19-25.

- *McMahon BJ, Shaprio CN and Robertson BH. (1995):*
 Hepatitis A. In bockus gastroenterology 5th ed rich Haubrich WS, et al. (editors) W.B Saunders Company; P : 2044 - 2056 .

- *McPherson MJ, Quirke P and Taylor GR. (1992):*
 PCR: A practical approach. IRL Press at Oxford University Press, Oxford.

- *Medhat N. (1992):*
 Hepatitis B and Hepatitis C viruses in blood donors. M. Sc. Thesis Microbiology and Immunology Fac. Med. Ain Shams Univ.

- *Meisel H, Reip A, Faltus B, et al. (1995):*
 Transmission of HCV to children and husbands by women infected with contaminated anti-D immunoglobulin. Lancet; 345: 1209-11.

- *Mellor J, Holmes L, Jarvis P, Yap P, Simmonds P and International HCV Collaborative Study Group (1995) :*
Investigation of the pattern of HCV sequence diversity in different geographical regions: Implications for virus classification. J. Gen. Virol ; 76 : 2493 - 2407 .

- *Mellor J, Walsh EA, Prescott LE, Jarvis LM, et al. (1996) :*
Survey of type 6 group variants of HCV in Southeast Asia by using a core based genotyping assay . J. Clin. Microbiol; 34(2) : 417 - 423 .

- *Melnick JL. (1982) :*
Classification of hepatitis A virus as enterovirus type 72 and hepatitis B virus as hepadna virus type 1 Intervirology; 18 : 105 .

- *Michel G, Ritter A and Gerken G. (1992) :*
Anti - GOR and hepatitis C virus in autoimmune liver disease. Lancet; 339 : 267 - 269 .

- *Miller RH, Kaneko S and Chung CT. (1989) :*
Compact organization of the HBV genome Hepatology; 9: 322 - 327.

- *Miller RH, and Purcell RH. (1990) :*
Hepatitis C virus shares amino acid sequence similarity with pestiviruses and flaviviruses as well as members of two plant virus supergroups. Proc. Natl. Acad. Sci. USA ; 87 : 2057 - 61 .

- **Minor PD. (1991) :**

Picornaviridae: Classification and nomenclature of viruses. Arch. Virol; (suppl 2) 320 - 326 .

- **Mishiro, S. Yoshida M, Okamoto H. (1996) :**

GBV-C in the aetiology of fulminant hepatitis. Lancet; 347: 120-121.

- **Mishiro S, Yoshi Y, and Takeda K. (1990) :**

Non-A, non-B hepatitis specific antibodies directed at host-derived epitope: Implication for an autoimmune process. Lancet; 336:1400- 1403.

- **Miskovsky EP, Carrella AV, Gutekunst K, et al. (1996) :**

Clinical characterization of a competitive PCR assay for quantitation testing of HCV. J. Clin. Microbiol ; 34 (8) : 1975 - 79 .

- **Mizuno Y, Suzuki K , Mori M , Hayashi K and Owaki T. (1997) :**

Study of needle stick accident and HCV infection in health care workers by molecular evolutionary analysis . J. Hosp. Infect; 35 (2): 149-54 .

- **Mohamed A. (1994):**

Prevalence of HCV and HBV in apparently normal population in Sharkia. M.Sc. Thesis Trop. Med. Zagazig Univ.

- **Mohamed K, Rakha M and Sheir S. (1996):**

Epidemiology of viral hepatitis C infection among Egyptians. Afro-Arab Conference on Liver and Biliary Diseases, Cairo, Egypt.

- *Moldvay J, Deny P, Pol S and Lamas E (1994):*

Detection of HCV RNA in peripheral blood mononuclear cells of infected patients by in situ hybridization. *Blood*; 83: 296-273.

- *Mosley JW. (1975):*

Hepatitis types B and non-B: Epidemiologic background. *JAM A*; 233:967-969.

- *Muerhoff AS, Simons JN, Leary TP, et al. (1996) :*

Sequence heterogeneity within the 5'- terminal region of the hepatitis GB virus C genome and evidence for genotypes HepatoC; 25 : 379 - 384.

- *Mullis KB. (1990):*

The unusual origin of the PCR. *Scientific American*; J. 56:63.

- *Mullis KB and Faloona F. (1987):*

PCR In: *Methods in enzymology*. by Wu. R. (ed). Academic Press, New York and London. Vol. 155 P: 335-350.

- *Muller HM, Pfaff E, Goeser T and Theilmann L. (1993):*

Peripheral blood leukocytes serve as a possible extra-hepatic site for HCV replication. *J. Gen. Virol*; 74: 669-676.

- *Muto Y, Sugiohara J, Ohnishi H, et al. (1990) :*

Anti HCV antibody prevails in fulminant hepatitis failure. *Gastroenterol. Jap*; 25 : 32 - 35 .

- *Nelson DR, Marousis CG, Davis GL and Lau JYN. (1997):*

The role of hepatitis C virus - specific cytotoxic T. lymphocytes in chronic hepatitis. *C. J. Immunol*, 158: 1473-81.

- **Nolte FS. (1997) :**

Laboratory diagnosis of hepatitis C. Immunol Invest; 26 :
199 - 207.

- **Nousbaum JB, Pol S, Nalpas B, Landais P, Berthelot P and Brechot C. (1995) :**

Hepatitis C virus type 1b (II) infection in France and Italy. Ann.
Intern. Med; 122: 161-168 .

- **Ohno T, and Mizokami M. (1998):**

Genotyping by type-specific primers that can type HCV types 1-6.
In: Methods in molecular medicine, Vol, 19: Hepatitis C protocols
Lau JYN (ed.) Humana Press Inc., Totowa, New Jersey; P: 159-164.

- **Ohno T, Mizokami M, MuRR, Saleh MG, et al. (1997):**

New HCV genotyping system that allows for identification of HCV
genotypes 1a, 1b, 2a, 2b, 3a, 3b, 4, 5a, and 6a.
J. Clin. Microbiol; 35: 201-207.

- **Ohto H, Terazawa S and Sasaki N. (1994) :**

Transmission of hepatitis C virus from mothers to infants N. Eng.
J. Med; 330 : 744 - 750 .

- **Okada K, Yamada T and Miyakawa Y. (1975) :**

Hepatitis B surface antigen in the serum of infants after delivery
from asymptomatic carrier mothers. J. Pediatr; 87 : 360 - 363 .

- **Okamoto H, Kurai K, Okada SI, Yamamoto K. (1992) :**

Full - length sequence of a HCV genome having poor homology to
reported isolates: Comparative study of four distinct genotype
Virology; 188: 331 - 341 .

- *Okamoto H, Nakao H, Inoue T, Fukuda M. (1997) :*

The entire nucleotide sequences of two GB virus C/ hepatitis G virus isolates of distinct genotype from Japan: J. Gen. Virol; 78: 737-748 .

- *Okamoto H, Odada S, Sugiyama Y and Kurai K. (1991) :*

Nucleotide Sequence of the genomic RNA of HCV isolated from a human carrier. Journal of General Virology; 73 : 673 - 79 .

- *Onji, M, Kikuchi T, Michitaka K, et al. (1991) :*

Detection of HCV antibody in patients with autoimmune hepatitis and other chronic liver disease. Gastroenterol Jap; 26 :182 : 186
Quoted from Brown D & Dusheiko G (1993) P. 283-301 .

- *Oshita M, Hayashi N, Mita E, Iio S. et al.(1998) :*

GBV - C / HGV infection in chronic hepatitis C patients Its effect on clinical features and interferon therapy J. Med. Virol; 55: 98 - 102 .

- *Panigrahi AK, Namda SK, Dixit RK, Zucherman AJ, et al. (1994):*

Diagnosis of HCV-associated chronic liver disease in India.
J. Med. Virol; 44: 176-179.

- *Panigrahi AK, Namda SK, Dixit RK, Zucherman AJ, et al. (1994):*

Diagnosis of HCV-associated chronic liver disease in India.
J. Med. Virol; 44: 176-179.

- *Patterson JL, and Femadez - Larson R. (1990) :*

Molecular action of ribavirin . Rev. Infect. Dis; 12: 1132 - 46 .

- *Patti AM, Santi AL, Pompa MG and Vescia N. (1991) :*

HCV and occupational hazard. Proceedings of the Third International Symposium in HCV. Strasbourg, France. September; 1991 : 88 .

- *Pawlotsky JM, Bastis A, Pellet C, Remire J. (1996) :*

Significances of indeterminate third-generation HCV recombinant immunoblot assay. J. Clin. Microbiol; 34 (1) : 80 - 83 .

- *Pawlotsky JM, Fleury A, Choukroun V, Deforges L. (1994) :*

Significance of highly positive C 22-3 indeterminate second generation HCV recombinant immunoblot assay and resolution by third - generation HCV RIBA. J. Clin. Microbiol; 32 : 1357 - 59 .

- *Pawlotsky JM, Taskiris L, Thorval FR. (1995) :*

Relation between HCV genotype and source of infection in patients with chronic hepatitis C. J. Infect. Dis; 171:1607-10 .

- *Pereira BJ, Millfoord EL, Kirkman RL and Quan S. (1992):*

Prevalence of hepatitis C virus RNA on organ donors positive for hepatitis C antibody and in the recipients of their organs.

N. Engl. J. Med; 327 : 910 - 915 .

- *Polmenberg AC. (1989):*

Sequence alignments of picornaviral capsid proteins. In Molecular Aspects of Picornaviral Infection and Detection. Semler BL, Ehrenfeld E (eds). Washington DC: American Society for Microbiology; P: 211 - 241 .

- *Pontisso P, Gerotto M, Baralle F and Alberti A, (1996):*
Hepatitis C genotypes in patients with dual hepatitis B and C infection. J. Med. Virol; 48: 157-160.

- *Pontisso P, Gerotto M, Chemello L, Casarin C and Tisminetz KY. (1995) :*
HCV genotype 1a and 1b: The clinical point of view.
J. Infect. Dis; 171 : 760 .

- *Pontisso P, Ruvoletto MG, Fattovich G and Alberti A. (1993):*
Clinical and virological profiles in patients with multiple hepatitis virus infections. Gastroenterology; 105: 1529-33.

- *Power JP, Lawlor E, Davidson F. (1994) :*
Hepatitis C virus in recipients of Irish interavenous anti-D immunoglobulin. Lancet; 334 : 1166 - 1167.

- *Prati D, capelli C, Silvani C, Demattei C, et al. (1997) :*
The incidence and risk factors of community - acquired hepatitis C in a cohort of Italian blood donors Hepatology; 25 : 702 - 704 .

- *Prieto M, Olaso V, Verdu C, Cordoba J and Gisbert C. (1995) :*
Does the healthy hepatitis C virus carrier state really Exist ? An analysis using polymerase chain reaction. Hepatology; 22: 413- 417.

- *Pujol FH, Pance JG, Lema MG, Capliles F. (1996) :*
High incidence of HCV in hemodialysis patients in units with high prevalence. J. Clin. Microbiol; 34 (7) : 1633 - 1636 .

- *Purcell RH, Wong DC and Mortisugu (1976) :*
A microtiter solid - phase radioimmunoassay for hepatitis A antigen and antibody. J. Immunol; 116 : 349 - 356.

- *Puro V, Petrosillo N, Ippolito G, Aloisi MS and Rava L. (1995) :*
Occupational HCV infection in Italian health care workers . Am J public health; 85: 1212 - 1275 .
- *Quan CM, Krajden M, Grigoriev GA and Salit IE. (1993) :*
Hepatitis C virus infection in patients infected with the human immunodeficiency virus. Clin. Infect. Dis; 17 : 117 - 119 .
- *Quer J and Esteban JI. (1997):*
Epidemiology and Prevention of HCV infection. In: Hepatitis C 1997 assays and expert opinions. By Decker R and Troonen H. (eds) Abbott Diagnostics Division, USA. P: 26-38.
- *Ralston R, Thudium K, Berger K, et al. (1993):*
Characterization of HCV envelope glycoprotein complexes expressed by recombinant vaccinia viruses. J. Viral; 67: 6753-61.
- *Rashed A, Farag A, El-Qershi T. (1993):*
Epidemiology of viral hepatitis in Egypt in the nineties. AMU Annual Congress 8th. Cairo. Feb. 1993; Abst.; P. 19.
- *Reitman S and Frankel S. (1957):*
Am. J. Clin. Path; 28:56.
- *Remick DG, Kunkel SL, Holbrook EA and Hanson CA. (1990):*
Theory and application of the PCR. American J. of Clin. Path; April (suppl 1): S 49 - S 54.

- ***Ribero ML , Tagger A , Testori T, Nardi G and Grosssi A. (1991) :***

Prevalence of HCV antibody among Italian dental practitioners
proceedings of the third international symposium of HCV
strasbough france. September 1991 : 96 .

- ***Rizzeto M, Bonino F and Verme G. (1995) :***

Hepatitis D (Delta) In: Bouckes Gastroenterology. 5th ed. Haubrich
WS et al., (editors) W.B Sauunders Company P: 2115 - 2124 .

- ***Rizzetto M, Canse MG and Arico S. (1977) :***

Immunofluorescence detection of a new antigen - antibody system
associated with the hepatitis B virus in the liver and in the serum of
HBsAg carriers. Gut; 18 : 997 - 1003 .

- ***Rizzetto M, Shin JWK and Gocke DJ. (1989) :***

Incidence and significance of antibodies to delta antigen in HBV
infection. Lancet; 2 : 986 - 990 .

- ***Robert K. (1992) :***

Acute viral hepatitis. In: Cecil Text Book of Medicine. Genes BY,
Loyd HS. Genes CB (eds). Vol; 1. W.B Sauderrrs Company; P : 673.

- ***Robertson BH, Khanna B and Nainnan OV. (1991) :***

Epidemologic Patterns of wild - type HAV determined by genetic
variation. J. Infect. Dis; 163: 286 - 292 .

- ***Rosa D, Campagnoli S, Moretto C and Guenzi E. (1996);***

A quantitative test to estimate neutralizing antibodies to the HCV.
Proc. Natl. Acad. Sci. USA; 93 (5): 1759-63.

- *Rosenstraus M, Wang Z, Chang SY and Spadaro JP. (1998):*

An internal control for routine PCR: design, properties and effect on clinical performance. J. Clin. Microbiol; 36: 191-197.

- *Roth WK, Lee JH, Ruster B and Zeuzem S. (1996) :*

Comparison of two quantitative HCV reverse transcriptase PCR assays. J. Clin. Microbiol; 34(2) : 261 - 264 .

- *Roth WK and Zeuzem S. (1997):*

Serological and molecular diagnosis of HCV infection. In: Hepatitis C 1997 essays and expert opinions. by Decker R and Troonen H. (eds). Abbott Diagnostics Division. USA P: 77-85.

- *Rothstein K, Suvannasankha A, Gross F, Peikin S, et al. (1998):*

Serum HCV RNA Kinetics during combination therapy with daily interferon alpha and ribavirin. American Association for the study of Liver Diseases, 49th Annual Meeting Chicago, Illinois. November: Abst. 75.

- *Saleh HA. (1995):*

Prevalence of HCV antibodies in patients with diabetes mellitus. M. Sc. Thesis . Clin. Path. Benha Faculty of Med. Zagazig Univ.

- *Saleh MG, Pereira LM, Tibbs CJ, et al. (1994):*

High prevalence of HCV in the normal Libyan population. Transactions of the Royal Society of Tropical Medicine and Hygiene; 88 (3): 292-294.

- *Sallberg M, Pumpen P, Zhang ZX, Lundholm P and Gusars I. (1994) :*
Location of antibody binding sites within conserved regions of the hepatitis virus core protein . J. Med. Virol; 43: 62-86 .

- *Samplietro M, Badalamenti S, Salvador S and Corbetta N. (1995) :*
High prevalence of a rare hepatitis C virus in patients treated in the same hemodialysis unit: Evidence of nosocomial transmission of HCV. Kidney Int; 47 : 911 - 917 .

- *Sanzonno D, Cornacchiulo V, Racanelli V, Dammacco F. (1997) :*
In situ simultaneous detection of HCV RNA and HCV-related antigens in hepatocellular carcinoma. Cancer; 80: 22- 33 .

- *Santolini E, Migliaccio G and La Monica N. (1994):*
Biosynthesis and biochemical properties of the HCV core protein . J. Virol; 68: 3631-41.

- *Sartori M, Terra GL, Aglietta M and Manzin A. (1993) :*
Transmission of hepatitis C virus blood splash into conjunctiva. Scand J. Infect. Dis; 25 : 270 - 71 .

- *Schaffner F. (1995) :*
Introduction to viral hepatitis In Bouchus Gastroenterology, 5th ed. by Haubrich WS et al. (editors) W.B Saunders Company; P: 2035-2041 .

- *Scheuer PJ, Ashrafzade HP, Sherlock S, Brown D, Dusheiko GM. (1992):*
The pathology of hepatitis C. Hepatol; 15:567 - 71 .

- *Schiff E, Peters M, Alter H, Hoofnagle J. et al. (1995) :*

Hepatitis C update (News letter) from the 95th annual meeting of the American Gastroenterological Association and Digestive Disease New York P2 .

- *Schneeberger PM, Keur I, vander vliet W, et al. (1998) :*

HCV infection in dialysis centers in the Netherland.
J. Clin. Microbiol; 36 : (6) : 1711 - 1715 .

- *Schreiber GB, Busch MP, Kleinman SH and Korelitz JJ. (1996):*

The risk of transfusion - transmitted viral infections. N. Engl. J. Med; 334: 1685-90.

- *Seeling R , Renz M, Bottner C and Selling HP. (1994) :*

Hepatitis C virus infection in dialysis units: Prevalence of HCV - RNA and antibodies to HCV. Ann. Med; 26: 45 - 52 .

- *Selby MJ, Choo QL, Berger K and Glazer E. (1993) :*

Expression, identification and subcellular location of the proteins encoded by the HCV genome. J. Gen. Virol; 74: 1103 - 13.

- *Serfaty L, Noursbaum JB, Giral P and Poupon R. (1995):*

Prevalence, severity, and risk factors of liver disease in blood donors positive in a second-generation anti-hepatitis C virus screening test. Hepatology; 21: 725-729.

- *Sevall JS, and Yashina T. (1998):*

Hepatitis C virus. In: Use and interpretation of laboratory tests in infectious disease. Peter JR (ed). 5th edition, Specially Laboratories, USA.

- *Shanson D.C. (1989) :*

Hepatitis infection In: Microbiology in clinical practice 2nd ed.
Wright, London, Boston; P: 362- 373 .

- *Sherker AH, Twu JS, Reyes GR and Robinson WS. (1993):*

Presence of viral replicative intermediates in the liver and serum of
patients infected with HCV. J. Med. Virol; 39: 91-96.

- *Sherlock S, and Dooley J. (1993):*

Viral hepatitis . In disease of the liver and Biliary system. 9th ed. by
sherlock S and Dooley J. (eds). Blackwell scientific publication;
P: 283 - 286.

- *Sherlock S and Dusheiko G. (1991):*

Hepatitis C virus updated. Gat; 32: 965-67.

- *Shih CM, Lo SJ, Miyamura T, Chen SY and Lee YH. (1993):*

Suppression of hepatitis B virus expression and replication by HCV
core protein in HuH-7 cells. J. Virol; 67: 5823-5832.

- *Shih JW-K, Esteben JJ and Alter HJ. (1986):*

Non-A, non-B, hepatitis: advances and unfulfilled expectations of
the first decade. Prog. Liver. Dis; 8: 433-452.

- *Shimizu YK, Feinstone SM, Kohara M, Purcell RH and Yoshikura H.
(1996) :*

Hepatitis C virus detection of intracellular virus particles by electron
microscopy. Hepatology ; 23 : 205 - 209 .

- *Shimizu YK, Feinstone SM and Purcell PH. (1979):*
Non-A, Non-B, hepatitis: Ultrastructural evidence for two agents in experimentally infected chimpanzees. *Science*; 205: 197-200.
- *Shimizu YK, Hijikata M, Iwamoto A, Alter HJ and Purcell RH. (1994) :*
Neutralising antibodies against hepatitis C virus and the emergence of neutralisation escape mutant viruses. *J. Med. Virol*; 68: 1494-1500.
- *Shimizu YK, Iwamoto A, Hijikata M and Purcell RH. (1992):*
Evidence for in vitro replication of HCV genome in a human T-cell line. *Proc. Natl. Acad. Sci. USA*; 89: 5477-5481.
- *Shimizu YK, Weiner AJ and Rosenblatt J. (1990):*
Early events in HCV infection of chimpanzees. *Proc. Natl. Sci. USA*; 87: 6441-6444.
- *Shirai M, Okada H, Nishioka M, Akatsuka T and Wychowski C. (1994):*
An epitope in hepatitis C core region recognised by cytotoxic T cells in mice and humans. *J. Virol* ; 68 : 3334 - 3342 .
- *Sidwell R, Hoffman J and Kharp L. (1972):*
Broad - spectrum activity of virazole. *Science*; 117: 705-6.
- *Silini EM, Bono F, Cividini A, Cerino A, Bruno S, and Belloni G. (1995):*
Differential distribution of hepatitis C virus genotypes in patients with and without liver function abnormalities. *Hepatology*; 21: 285- 290 .
- *Simmonds, P. (1995) :*
Variability of hepatitis C virus . *Hepatology* ; 21 : 570 - 583 .

- *Simmonds P, Alberti A, Alter HJ, Bonino F, et al. (1994) :*

A proposed system for the nomenclature of hepatitis C viral genotypes
Hepatology; 19: 1321 - 24 .

- *Simmonds P, Rose KA, Graham S. (1993) :*

Mapping of serotype - specific immunodominant epitopes in the
NS4 region of HCV: Use of type - specific peptides to serologically
differentiate infection with HCV types 1, 2 and 3, J. Clin. Microbiol;
31 : 1493 - 1503 .

- *Simons JN, Pilot - Matias TJ, Leary TP, et al. (1995) :*

Identification of two flavivirus - like genome in the GB hepatitis
agent. Proc. Natl. Acad. Sci. USA; 92 : 3401 - 5 .

- *Smedile A, Bregman KF and Baroudy BM. (1990) :*

Riprobe assay for HDV RNA: A sensitive method for the
detection of the HDV genome in clinical serum samples J. Med.
Virol; 30 :20- 24 .

- *Smith DB and Simmonds P. (1998):*

Hepatitis C virus: types, subtypes and beyond. In: Methods in
molecular medicine, Vol. 19: Hepatitis C Protocols. Lau JNY (ed.)
Humana Press Inc., Totowa, New Jersey; P: 133-146.

- *Soliman AFM. (1997):*

Assessment of cases accidentally discovered to be anti-HCV
positive: Clinically, laboratory and sonographic basis. M. Sc. Thesis.
Tropical Medicine. Faculty of Med. Cairo Univ.

- Soni PN, Khakoo SI, Dusheiko GM. (1994) :

Viral hepatitis in recent advances of gastroenterology by Roy P (ed)
Churchill Livingstone; P; 248 - 259 .

- Stephen CH and Howard AF. (1991) :

Hepatitis D virus In: Robert B.B text book of human virology 2nd ed.
Mosby year book; P: 749 - 765 .

- Stuyver L, Claeys H, Wyseur A, van Arnhem W. (1996 a) :

HCV in hemodialysis unit: Molecular evidence for nosocomial
transmission ; kidney int., 49 : 889 - 95 .

- Stuyver L, Rossau R, Wyser A, Duhamel M. (1993) :

Typing of HCV isolates and characterization of new (sub) types
using a line probe assay. J. Gen. Virol; 74 : 1092 - 1102 .

- Stuyver L, Wyseur A, Vanarnhem W and Maertens G. (1996 b):

A second-generation line probe assay for HCV genotyping .
J. Clin. Microbiol; 34: 2259-66.

- Tabor E, Gerety RJ and Drucker JA. (1978):

Transmission of non-A, non-B hepatitis from man to chimpanzee.
Lancet; 1: 463-66.

- Tacke M, Kiyosawa K, Stark K, Schleuter V, et al. (1997) :

Detection of antibody to putative HGV envelope protein.
Lancet; 349: 318 - 320 .

- *Takahashi K, Kishimoto S, Yoshizawa H, Okamoto A. (1992) :*
P 26 proteins and 33 - nm particles associated with nucleocapsid of
HCV recovered from the circulation of infect. host *Virology*;
191 : 341- 434 .

- *Takamatsu J, Tusda F, Okudaira M. (1998) :*
Infection with GB virus C, Hepatitis C and B viruses in 1,044 cases
autopsied at the medical examiner's office in Tokyo. *J. Med. Virology*;
55 : 123 - 128 .

- *Takamizawa A, Mori C, Fuke I, Manabe S, et al. (1991) :*
Structure and organization of HCV genome isolated from human
carriers. *Journal of Virology*; 65 : 1105 - 13 .

- *Takano S, Ito Y, Yokosuka O, et al. (1994):*
A multicenter randomized controlled dose study of ursodeoxy
cholic acid for chronic hepatitis C. *Hepatology*; 20: 558-564.

- *Tanaka T, Kato N, Nakagawa M, Cho MJ and Hijikato M. (1992):*
Molecular cloning of HCV genome from a single Japanese carrier
Virus Research; 23: 39-53.

- *Tarasov KV, Pisareva MM, Grudinin MP, et al. (1997):*
HCV genotyping in St. Petersburg region comparing different
approaches. *Gastroenterol Clin. Biol*; 21 (10): Abst. 52.

- *Tes Rj, Waller K, Morgan CJ and Delaney S. (1994) :*
Transmission of hepatitis C by kidney transplantation. *Trans-*
plantation; 57: 826 - 831 .

- *Thaler MM, Park CK, Landers DV, et al. (1991) :*

Vertical transmission of the hepatitis C virus. *Lancet*; 338 : 17 - 18 .

- *Theilmann L, Klinfert MQ, and Gmetin K. (1987) :*

Detection of antibodies against pre-S1 proteins in sera of patients with HBV infection. *J. Hepatol*; 4: 22- 28 .

- *Thomas DL, Zenilman JM and Alter HJ. (1995):*

Sexual transmission of HCV among patients attending sexually transmitted diseases clinics in Baltimore. *J. Infect. Dis*; 171: 768-75.

- *Thomssen R, Bonk S and Thiele A. (1993):*

Density heterogeneities of HCV in human sera due to the binding of beta-lipoproteins and immunoglobulins. *Med. Microbiol Immunol*; 182: 329-334.

- *Todros L, Saracco G, Durazzo M, et al. (1995):*

Efficacy and safety of IFN- α therapy in chronic hepatitis C with autoantibodies to liver-kidney microsomes . *Gastroenterology*; 22 (5): 1374-1378.

- *Tokita H, Okamoto H, Tsuda F, Song P, et al. (1994) :*

HCV variants from Vietnam are classified into the seventh, eighth, and ninth major genetic groups. *Proc. Natl. Acad. Sci*; 91: 11022- 11026 .

- *Trepo C, Cortey ML and Berby F. (1994):*

Detection of HCV-RNA by PCR in acute and chronic hepatitis C. International Symposium on Viral hepatitis. Athens. September 1994.

- *Tsantoulas D, Vafiades I, Kronborg I, Lurie Y and Stalgis C. (1998):*

Four weeks of daily therapy with IFN- α 2b + ribavirin followed by standard therapy in genotype 3. American Association for the study of Liver Diseases, 49th Annual Meeting Chicago, Illinois. November 1998 Abst. 1263.

- *Tsiquaye KN, and Zuckerman AJ. (1979):*

New human hepatitis virus Lancet; 1: 1135-36.

- *Tsuda F, Hadiwandowo S, Sawada N, Fukuda M, et al. (1996) :*

Infection with GB virus C in patients with chronic liver disease or on maintenance hemodialysis in Idonesia J. Med. Virol; 49: 248 - 252 .

- *Tsukiana - Kohara K, Iizuka N, Kohara M and Nomoto A. (1992):*

Internal ribosome entry site within HCV RNA. J. Virol; 66: 1476-83.

- *Turkoglu S, Lazizi Y, Meng J, Kordosi A, et al. (1996):*

Detection of hepatitis E virus RNA in stools and serum by RT-PCR. J. Clin. Microbiol; 34 (6): 1568-71.

- *Vander Poel CL, Cuypers HT, Reesink HU. (1994) :*

HCV 6 years on Lancet; 344 : 1475 - 79 .

- *Vander Poel CL, Reesink HW, Schaasberg W, (1990) :*

Infectivity of blood seropositive for HCV antibodies. Lancet; 335 : 558 - 60.

- *van Doorn LJ. (1994) :*

Molecular biology of hepatitis C virus. J. Med. Virol; 43 : 345 - 356.

- *van Doorn LJ, Kleter B, Stuyver L, Maertens G, et al. (1994 b):*

Analysis of HCV genotype by a line probe assay and correlation with antibody profiles. J. Hepatol; 12: 122-29.

- *van Doorn LJ, Kleter B, Stuyver L, Maertens G, et al. (1995) :*

Sequence analysis of HCV genotypes 1 to 5 reveals multiple novel subtype in the Benelux countries. J. Gen. Virol ; 76 : 1871 - 76 .

- *van Doorn LJ, Kleter B, Pike I and Quint W. (1996):*

Analysis of HCV isolates by serotyping and genotyping. J. Clin. Microbiol; 34 (7): 1784-87.

- *van Doorn LJ, Quint W, Tsiquay K and Voermans J. (1994 a) :*

Longitudinal analysis of HCV infection and genetic drift of the hypervariable region. J. infect. Dis; 169: 1226 - 35 .

- *Vargas H, Iwang L, Laskus T, et al. (1997):*

Distribution of infecting HCV genotypes in end-stage liver disease patients at a large American transplantation center. J. Infect. Dis.; 175: 448-450.

- *Venuti A, Di Rousso C and del Grosso N. (1985) :*

Isolation and molecular cloning of a fast growing strain of human HAV from its double-stranded replicative form. J. Virol; 56 : 579 - 588 .

- *Viazov S, Riffelmann M, Sarr S, Ballauff A, et al. (1997) :*

Transmission of GBV -C /HGV from drug addicted mothers to their babes. *Hepatology*; 27:85-90 .

- *Vrieling H, Van der poel H, Reesink H, Zaaijer E et al. (1995) :*

Look - back study of infectivity of anti - HCV ELISA - positive blood components. *Lancet*; 345 : 95 - 96 .

- *Wang C, Sarnow P, Siddiqui A. (1993) :*

Translation of human HCV RNA in cultured cells mediated by an internal ribosome - binding mechanism. *J. Virol*; 67: 3338 - 44.v

- *Wang JT, Sheu JC, Lin. JT, Wang TH and Chen DS. (1992):*

Detection of replicative form of HCV RNA in peripheral blood mononuclear cells. *J. Infect. Dis*; 166: 1167-1169.

- *Wang Y, Chen HS, Fan MH, Liu HL et al. (1997) :*

Infection with GB virus C and HCV in hemodialysis patients and blood donors in Beijing. *J. Med. Virol* ; 52 : 26 - 30 .

- *Watanabe J, Minegishi K, Mitsumori T, et al. (1990):*

Prevalence of anti-HCV antibody in blood donors in Tokyo area. *Vox Sang*; 59: 86-88.

- *Watson HG, Ludlam CA, Rebus S, Zhang LQ, and Simmonds P. (1992):*

Use of several second generation serological assays to determine the true prevalence of HCV infection in haemophiliacs treated with non-virus inactivated factor VIII and IX concentrates.

Brit. J. Hematology; 80: 514-18.

- **Weiland E, Stark R, Haas B and Meyers G. (1990):**

Pestivirus glycoprotein which induces neutralizing antibodies forms part of a disulfide-linked heterodimer. J. Virol; 64: 3563-3569.

- **Weiner AJ, Brauer M, Rosenblatt J, Richman H. et al. (1991) :**

Variable and hypervariable domains are found in the region of HCV corresponding to the flavivirus envelope and NS1 proteins and the pestivirus envelope glycoproteins. Virology ; 180 : 842 - 48 .

- **Weiner AJ, Geysen HM, Cristopherson C, Hall JE, Mason TJ, (1992):**

Evidence for immune selection of HCV putative envelope glycoprotein variants. Proc. Natl. Acad. Sci. USA; 89 : 3468 - 72 .

- **Weiner AJ, Thaler MM and Crawford K. (1993):**

A unique, predominant HCV variant found in an infant born to a mother with multiple variants. J. Virol; 67: 4365-4368.

- **Wenham PR. (1988):**

DNA-based technique in clinical biochemistry. Annals of Clinical Biochemistry; 162: 589-623.

- **White TJ, Madey R and Presinger DH. (1992):**

The PCR: Clinical applications. Advances in Clinical Chemistry; 29:161-169.

- **WHO (1983):**

Hepatitis programme. Lancet; (ii): 350.

- **WHO (1997):**

Hepatitis C. Weekly Epidemiological. Record; 72(10): 65-72.

- *Widell A, Shev S, Mansson S and Foberg U. (1994) :*

Genotyping of HCV isolates by a modified polymerase chain reaction assay using type specific primers. J. Med. Virol; 44 : 272 - 79

- *Wilber JC and Polito A. (1995);*

Serological and virological diagnostic tests for HCV infection. Semin. Gastroenterol Dis; 6: 13-19.

- *Wilber JC and Urdea MS. (1998);*

Quantification of HCV RNA in clinical specimens by branched DNA technology In: Methods in molecular medicine, Vol. 19: Hepatitis C Protocols. Lau JYN. (ed.). Humana Press Inc., Totowa, New Jersey; P: 71-78.

- *Wong DC, Rosen L and Purcell RH. (1978) :*

Seroepidemiology of viral hepatitis in the South Pacific. In Viral Hepatitis. by Vyas GN Cohen SN, Schmid R (eds) Philadelphia, Franklin Institute Press; P: 733 - 734.

- *Wong DKH, Cheung AM and O'Rourke K. (1993) :*

Effect of alpha interferon treatment in patients with hepatitis Be antigen positive chronic hepatitis B. Ann. Intern. Med; 119: 312-323.

- *World Health Organization (WHO). (1997) :*

Hepatitis C. Weekly Epidemiological Record; 72 (10) : 65-72

- *Wreghitt TG, Gray JJ, Allain JP and Poulain J. (1994) :*
Transmission of hepatitis C virus by organ transplantation in the United Kingdom. *Hepatology*; 20 : 768 - 772 .
- *Wright T, Hsu H, Donegan E. (1991) :*
HCV can not be found in fulminant non - A, non - B hepatitis. *Ann. Int. Med*; 115 : 111 - 112 .
- *Wu RR, Mizokami M, Lau J, Ohno T. (1995) :*
Seroprevalence of HCV infection and its genotype in Lanzhou, Western China *J. Med. virol* ; 45 : 174 - 178 .
- *Yano M, Yatsunami H, Inoue O, and Koga M. (1993):*
Epidemiology and long term prognosis of HCV infection in Japan. *Gut*; 34: 13-16.
- *Yap PL, McOmish F, Webster AD, Hammarstrom L. (1994) :*
HCV transmission by intravenous immunoglobulin. *J. Hepatology*; 21: 455 - 60 .
- *Yashina T, Sevall J, El-Zayadi A, et al. (1996):*
HCV genotypes among Egyptian chronic hepatitis C patients. 1- ISVH. Cairo, Egypt. Abst. OA6.
- *Yoo BJ, Spaete RR, Geballe AP, Selby M, and Han JH. (1992):*
5' end-dependent translation initiation of HCV RNA and the presence of putative positive and negative translational control elements within the 5' untranslated region. *Virology*; 191: 889-899.

- *Yoshida M, Sekiyama K and Iwamura A. (1996) :*

Antibodies to HCV in non - A, non - B fulminant viral hepatitis
Gastroenterol Jap 23: 275. Quoted from Liang TI, Jeffers L, Reddy
RK (1993): Fulminant or subfulminant non-A, non-B viral
hepatitis. Gastroenterol; 104 : 554 - 562 .

- *Yoshioka K, Aiyama T, Okumura A, Takayanagi M, et al. (1997):*

Humoral immune response to the hypervariable region of HCV
differs between genotypes 1b and 2a. J. Infect. Dis; 175: 505-510.

- *Young KC, Chung TT, Liou TC and Wu HL. (1993):*

Detection of HCV RNA in peripheral blood mononuclear cells and
saliva. J. Med. Virol.; 41: 55-60.

- *Yuasa T, Ishikawa G, Manabe S and Miyamura T. (1991):*

The particle size of HCV estimated by filtration through
microporous regenerated cellulose fibre. J. Gen. Virol; 72:
2021-2024.

- *Yuki N, Hayashi N and Kamada T. (1993):*

HCV viraemia and liver injury in symptom-free blood donors.
Lancet; 342: 444.

- *Yuki N, Hayashi N, Kozakura A, Hagiwara H and Kamada T. (1994):*

HCV replication and antibody responses toward specific HCV
proteins. Hepatology; 19: 1360-65.

- *Yuki N, Hayashi N, Mita E, Hagiwara H, et al. (1995) :*

Clinical characteristics and antibody profiles of chronic hepatitis C
patients. Relation to HCV genotypes. J. Med. Virol; 45 : 162 - 167 .

- *Zaaijer HL, Vallari DS, Cunningham M, et al. (1994):*

E2 and NS5: New antigens for detection of HCV antibodies.

J. Med. Virol; 44: 395-97.

- *Zaida Y, Chapman CS, Myint S. (1996) :*

Aplastic anaemia after HCV infection. Lancet; 348 : 471 - 472 .

- *Zanetti AR, Tanzi E, Paccagnin S, Principi N. (1995):*

Mother to infant transmission of HCV. Lancet; 345: 289-91.

- *Zeuzem S, Lee JH and Roth KW. (1997) :*

Mutations in the non structural 5A gene of European HCV isolates and response to interferon alpha. Hepatology; 25 : 740 - 4 .

- *Zhou, Terrault N, Ferrel L and Hahn JA. (1996) :*

Severity of liver disease in liver transplantation recipients with HCV infection: Relationship to genotype and level of viremia. Hepatology; 24: 1041 - 46 .

- *Zibert A, Schreier E and Roggendorf M. (1995):*

Antibodies in human sera specific to hypervariable region 1 of HCV can block viral attachment. Virol; 208: 653-61.

- *Zuckerman AJ. (1990):*

Viral hepatitis In: Hunter's tropical Medicine. 7th ed. by Strickland GT (ed). W.B. Saunders Company P: 186-199.

- *Zucherman AJ. (1996) :*

Alphabet of hepatitis viruses. Lancet; 347 : 558 - 559 .