forms of hepatitis, with a concordance between the evaluations performed through the two scoring systems.
2. The severity of the necroinflammatory lesions progressed parallel to the patients’ age.
3. Irrespective of the scoring system used, the necroinflammatory activity – evaluated at different levels – correlated with the stages of fibrosis.

**Objective:** To analyze the neutralization activity against HCV of sera from hepatitis C patients.

**Methods:** A eukaryotic expression plasmid encoding carboxyl terminal-truncated HCV envelope protein 2 (E2) was transfected into human 293T cells. Both intracellular E2 and secreted E2 protein could be detected by western blot analysis. The intracellular E2 was used to assay anti-E2 antibodies in sera of hepatitis C patients by ELISA. The full-length envelope protein expression plasmid was transfected into 293 T cells and the reactivity of transfectant with anti-E2 IgG positive sera were analyzed by immunofluorescence. Five strains of HCV pseudotype particle (HCVpp) and two strains of cell cultured HCV (HCVcc) were used to assay the neutralization activity of 12 anti-E2 positive sera samples.

**Results:** ELISA showed 26 of 32 sera samples were anti-E2 IgG positive. The intensity of intracellular green fluorescent was paralleled with anti-E2 antibodies level of the tested sera using immunofluorescence assay. For 12 sera samples with HCV RNA positive, the virus load is negative correlated with anti-E2 antibodies levels. The anti-E2 positive sera could neutralize five strains of HCVpp and two strains of HCVcc at various degree, and the neutralization activity was consistent with the anti-E2 antibodies levels.

**Conclusion:** The results suggested that cross-neutralization antibodies against HCV are present in sera of hepatitis C patients, which indicated that development of vaccines that induce broadly-reactive neutralization antibodies may be possible.

**Objective:** To investigate the modes of transmission and treatment outcome in chronic hepatitis C patients.

**Methods:** We analyzed the clinical data of 110 patients diagnosed as chronic hepatitis C, and recorded the modes of transmission, clinical manifestation and the feature of laboratory examination. We long-term followed up the patients during therapy.

**Result:** 35.5% of the patients was found on blood or blood products transfusion, 44 patients on surgery and trauma operation (40%). The rate of HCV genotype 1b and 2a is 50.9% and 16.4% respectively. The rate of viral load at 10^4 and 10^6 IU/ml is 27.3% and 38.2% respectively. Obvious clinic presentation is observed in 20.9% of patients, and 79.1% does not have obvious hepatitis symptom and physical sign. Total SVR rate is 64.9%, genotype 1 is 54.3%, non-1 is up to 83.3%. Fever, fatigue and the decreasing symptom and physical sign. Total SVR rate is correlated with HCV genotype, age and viral load, whereas there is no relation to ALT level.

**Conclusion:** The predominant modes of transmission is blood transfusion or the using of blood products. However, surgery and trauma operation should be paid more attention, especially traditional Chinese medicine acupuncture. Coinfection with HBV accounts for a certain proportion. The most common genotypes are 1b and 2a. There is no obvious hepatitis symptom and physical sign. The impact factors on SVR are predominately HCV genotype, RNA level and age, whereas the serum ALT level is not significant impact factor.

**Objective:** To analyze the neutralization activity against HCV of sera from hepatitis C patients.

**Methods:** We investigated the 21 type I and III IFN subtypes in sera of hepatitis C patients.

**Result:** Following different stimulations (Poly I:C for TLR3, CI097 for TLR7/8, CpG-A for TLR9, HSV-1, VSV), constitutive expression of IFN subtypes is different for different therapeutic outcome.