CHAPTER 5

DISCUSSUON CONCLUSION AND RECOMMENDATION

Conclusion

Hepatitis C is a viral infection of the liver which had been referred to as parenterally transmitted "non A, non B hepatitis" until identification of the causative agent in 1989. The discovery and characterization of the hepatitis C virus (HCV) led to the understanding of its primary role in post-transfusion hepatitis and its tendency to induce persistent infection.

HCV is a major cause of acute hepatitis and chronic liver disease, including cirrhosis and liver cancer. Globally, an estimated 170 million persons are chronically infected with HCV and 3 to 4 million persons are newly infected each year. HCV spreads primarily by direct contact with human blood. The major causes of HCV infection worldwide are use of unscreened blood in transfusions, and re-use of needles and syringes that have not been adequately sterilized.

No vaccine is currently available to prevent hepatitis C and treatment for chronic hepatitis C is too costly for most of the people in the developing countries to afford. Thus, from a global perspective, the greatest impact on hepatitis C disease burden will likely be achieved by focusing efforts on reducing the risk of HCV transmission from nosocomial exposures (e.g. blood transfusions, unsafe injection practices) and high-risk behaviors (e.g. injection drug use).

Full recovery from acute hepatitis C is not the most common course. Although the exact rate of resolution is not known, it is believed to be around 15%. In most patients, HCV infection becomes chronic. The rate of chronicity ranges from 50% to 90% according to different studies (Fig.1).

Mild chronic hepatitis is the most common form of chronic hepatitis C in young patients. Although the long-term outcome of this pattern of chronic hepatitis C is not well known, this type of chronic hepatitis C generally seems to progress very slowly and the long-term risk of developing cirrhosis is low.

Moderate or severe chronic hepatitis should be defined by the presence of marked ncro-inflammatory lesions and/or extensive fibrosis on liver biopsy. These patients are difficult to distinguish from those with mild chronic hepatitis. Clinically, many are asymptomatic or have nonspecific symptoms and the intensity of fatigue, if present, is not correlated with the severity of liver disease. Cllinical examination is generally normal. Furthermore, although patients with moderate or severe chronic hepatitis generally have higher serum ALT levels (fluctuating between 2 and 10 times the upper limit of normal range), serum ALT levels are not a good prognosis factor on an individual basis.

Cirrhosis and hepatocellular carcinoma

The most serious complication of chronic hepatitis C is the development of cirrhosis. Cirrhosis rarely develops a few years after infection; it generally develops slowly within 2 or 3 decades. In studies with 10-20 years of follow-up, cirrhosis develops in 20-30% of patients. In patients with HCV-related cirrhosis, mortality related to portal hypertension, hepatic failure or hepatocellular carcinoma is 2-5% per year. End-stage HCV-related cirrhosis is the most prevalent indication for liver transplantation: it accounts now for 30% of the liver transplants. Hepatocellular carcinoma generally occurs in patients with cirrhosis; it is rare in patients with chronic hepatitis C without cirrhosis. In patients with HCV related cirrhosis, the incidence of hepatocellular carcinoma is high, ranging from 3% to 10% per year. The incidence in Western countries is 3-5% per year; it is higher in Asian series. Hepatocellular carcinoma often occurs in compensated cirrhosis and is clinically silent for a long time. Therapies of hepatocellular carcinoma are unsatisfactory and liver transplantation can only be offered in a minority of selected patients.

For the patient that was randomly selected at Thai Red Cross , with the use the Elisa test to screened for hepatitis C virus was yield out positive for the result. Hepatitis C virus still no vaccine available but for the prevention was the screening process the ratio yield out 90.51. The benefit gave a tremendous cost that can save for the future cost.

From data collecting at Chulalongkorn Memorial Hospital, first state for HCV unable to define due to the symptom of the disease does not show. The majority were in the second state that came to receive the treatment. The treatment cost for chronic was 4,990 Baht /year, and the incubation period was 10 year. It present value was 42,565 baht at 3% annual rats discount. Interferon also combined to treat at Chronic state, at first year right after been diagnosis for Chronic hepatitis C. In Thailand, cost of the interferon is very high and the result did not help the patient to be back to a normal status, but it can help to prolong the prognosis of the disease. In this study, we concentrated on only conventional treatment. For cirrhosis was 41,844 Baht / year, and the incubation period was 5 year. The present value was 138,386 Baht at 3% annual rats discount and for carcinoma was 74,166 Baht, and the incubation period was 5 months. Its present value was 46,217 baht at 3% annual rats discount. Over all of the cost for HCV was 438,886 Baht at 3% annual rats discount.