History of hepatitis and liver disease in Indonesia*

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Until the third and fourth decade of the 20th century in Indonesia, medical science only knew two types of hepatitis, infectious hepatitis and serum hepatitis. Epidemiologically, our forefathers in medicine could differentiate between the two types from the history of how the patients contracted jaundice, because yellowing of the eyes was the only other presenting symptom beside anorexia and nausea.

In most instances infectious hepatitis had a short incubation period and was related to eating some suspicious food or to the history of contact with other patients with jaundice, while serum hepatitis had a long incubation period and was related to the history of blood transfusion or surgery, and in most instances had no distinctive source of infection at all. Weakness was also remarkable.

To confirm the diagnosis of hepatitis doctors relied mostly on zinc turbidity and thymol turbidity tests, which only denoted the increase of gamma globulin in blood, beside bilirubin in blood and urine.

During the late 1970s which saw the development of the hepatitis B surface antigen (HBsAg) test and the establishment of Asian Pacific Association for the Study of the Liver (APASL), we had our first national meeting of specialists interested in liver disease. It became apparent that about 20–40% of our liver disease cases were related to HBsAg. Even in liver cancer the association was more than 50% in some areas of Indonesia.

Inspired by the establishment of APASL in Singapore, at that first conference we also established our Indonesian Association for the Study of Liver Diseases (INA–ASL). We organized mostly those doctors and scientists who were interested in liver disease and who worked at the University center. Since that time our association and the members of INA–ASL, by which we call ourselves, collaborated with many university centers and several national organizations from different countries, but primarily with Japan and several centers in Europe.

Before the INA–ASL period, our center in Jakarta had already developed and pioneered a method of peritoneoscopy or laparoscopy and needle biopsy of the liver to confirm the diagnosis of different kinds of liver disease. In the framework of INA–ASL we are sharing our experiences among different centers in Indonesia and are beginning to compile our national figures for different kind of data related to liver disease in Indonesia, such as the incidence of HBsAg in 5–19%, anti-HCV 2–3%, and so on. Some of our experts did their research work under the guidance of different foreign research scientists, until some of them received PhD degrees.

Even in clinical sciences we enjoy many benefits of this collaboration, and beside peritoneoscopy, we are already developing diagnostic and interventional ultrasonography, endoscopy, ERCP and endosonography.

In the field of hepatitis, beside hepatitis A, we are not only familiar with HBsAg and its subtypes, but also hepatitis virus C, E, G and recently TT virus, and for virus C, beside genotype-II, which is prevalent, we have also found a genotype specific to Indonesia.

In the field of therapy, we are familiar with the use of interferon for hepatitis B and C. We know from experience that the response rate is low when using only alpha interferon as monotherapy, and we get some relapses and non-responders. This may be related to genotype II which is prevalent in Indonesia. The combination or induction therapy might give much better results. However, with the recent economic situation in Indonesia, the use of interferon is becoming very selective. Hopefully this will improve in the near future.

In relation to hepatitis B with positive HBV–DNA we are now using lamivudine even on patients with normal aspartate aminotransferase and alanine aminotransferase as a clinical trial. We are still waiting for the results of these trials.

Concerning liver cancer, in most centers we are already at the stage of early detection, with consequent regular follow up of our chronic liver disease cases.

We are aware that there is no treatment for liver cancer in the late stages, and we expect that by early detection we can carry out trans-arterial embolization or percutaneous intra-tumor absolute alcohol injection. But presentations at a late stage of liver cancer are still prevalent.

Although we have made progress in the field of research and management of liver disease in Indonesia, we are still finding cases with amebic liver abscesses, typhoid hepatitis and malaria hepatitis, which typify the condition of infectious diseases in Indonesia. We are occasionally still finding tuberculosis involving the

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intra-abdominal organs, including the liver. As it is universal in developing countries, in some aspects we are advancing, but in other aspects of liver disease we are still involved with the old problems. Complication of cirrhosis, such as bleeding from the upper gastrointestinal tract are still prevalent, and we have come to the stage of using variceal ligation.

In conclusion, we can say that the establishment of APASL has also triggered the establishment of the Indonesian Association for the Study of Liver Diseases and this has generated research and advances in the management of liver disease and its complications. This also makes it possible for us to do joint activities in Indonesia.