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— Contents —

Announcement

Acute Viral Hepatitis and Measles Added to List of Reportable Diseases

The articles in this issue of the *Epidemiology Bulletin* announce the addition of acute viral hepatitis and measles (rubeola) to the list of reportable diseases. These diseases cause significant morbidity and mortality in Taiwan. To follow their trends, identify outbreaks, and evaluate the impact of our immunization programs, they will be included in the routine surveillance system. The staff of the Bureau of Disease Control would like to acknowledge the efforts of public health workers at the city and county levels for helping to implement these changes in the reporting system and making the Republic of China a healthier place to live.

Hepatitis B Control in Taiwan

The evidence that hepatocellular carcinoma (HCC) and cirrhosis of the liver are related to chronic carriage of hepatitis B virus (HBV) is overwhelming.[1] In 1983, malignant neoplasms were the leading cause of mortality in Taiwan with an annual rate of 81.65 deaths per 100,000 population.[2] HCC was the cause of approximately 20% of all cancer deaths in 1983, and was the leading cause of cancer mortality for men and the second leading cause of cancer mortality for women.[3] Liver cirrhosis was the sixth leading cause of mortality in 1983 with an annual rate of 17.11 deaths per 100,000 population.[2]

In Taiwan, the carriage rate of hepatitis B surface antigen (HBsAg) is one of the

highest in the world (15-20%).[4] There is clear evidence that the earlier in life infection occurs, the greater the probability of becoming a highly infectious e-antigen positive chronic carrier.[5] Currently, about 40% of chronic HBsAg carrier mothers in Taiwan are e-antigen positive.[6] This rate is much higher than in most other parts of the world where HBV is endemic. Infants born to e-antigen positive mothers have at least a 90% probability of also becoming chronic HBsAg carriers.[7] Fortunately, the majority of infants are infected at the time of delivery, presumably from contact with maternal blood, only a small proportion are believed to acquire the *infection in utero*.[8] This is important because it implies that perinatal transmission is preventable

In 1981, Beasley et al found that three 0.5 ml injections of hepatitis B immune globulin (HBIG) given at birth, three and six months of age respectively, had an efficacy of 75% in preventing perinatal transmission of hepatitis B.[7] In 1983, HBV vaccine was shown to have an efficacy of about 90% in preventing perinatal transmission when administered in conjunction with a single dose of HBIG.[9,10] This important discovery opened a new era for the control of hepatitis B in Taiwan.

In 1981, the Executive Yuan established the Hepatitis B Control Program to reduce hepatitis B morbidity and mortality. Although the program has many components, its main focus is on preventing perinatal transmission through immunization.

In July 1984, a program was established to screen all pregnant women in Taiwan for HBsAg. Infants born to HBsAg positive women receive HBV vaccine (Institut Pasteur Production) 5 μg at age 1, 5, and 9 weeks with a booster at age 12 months. Infants born to e-antigen positive women, or those born to women with a reverse passive hemagglutination (RPHA) HBsAg titer of ≥ 1:2560 in areas where e-antigen testing is not yet available, receive both HBV vaccine and HBIG (0.5 ml at birth).

HBsAg positive women and their infants are registered in the Hepatitis Information Center (HIC) in the Department of Health. Registered women receive a booklet of coupons which they redeem for subsequent doses of vaccine for their infants. The coupons are forwarded to the HIC to follow immunization compliance.

The HIC also maintains a registry for patients with liver diseases. Although this registry provides valuable information for hepatitis research, it is of limited use for hepatitis morbidity surveillance because only a small, non-representative sample of the general population is included. Monitoring acute viral hepatitis morbidity is important for evaluating the hepatitis B immunization program and for detecting outbreaks.

The Bureau of Disease Control has therefore recommended that *acute viral* hepatitis be added to the list of reportable diseases Cases of acute viral hepatitis should be reported to local county or city health departments using existing disease report forms. Completed forms should include the patient's name, age, sex, address, a brief description of clinical symptoms, physical findings, and pertinent laboratory information.

Since it is difficult to differentiate acute and chronic viral hepatitis in Taiwan, reported cases should have liver enzyme levels (SGOT/SGPT) at least ten times normal. Whenever possible, acute viral hepatitis should be further differentiated into type A, B,

or non-A,' non-B by appropriate serologic testing If such testing is unavailable, however, it should not discourage reporting

Reported by the Hepatitis B Control Committee and the Epidemiology Division, Bureau of Disease Control, Department of Health, Executive Yuan.

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