

## **Baby Stool Card – A great indicator of biliary atresia**

Biliary atresia is the most common and most serious disease in extrahepatic cholestasis. It is also the main cause for children to undergo liver transplant. Sick infants mostly have symptoms of jaundice and pale stools. If not diagnosed and treated early, bile would accumulate in the liver and cause liver cirrhosis and even fatal liver disease. Sick infants of this kind, if undergo Kasai's Operation within 60 days (the earlier the better) after birth, will definitely improve and have a better chance of survival.

In order to establish the baby stool card screening system for early diagnosis and treatment of the said disease, the DOH has commissioned the National Taiwan University Hospital to conduct a program for the 'promotion of baby stool card and establishment of a follow-up model for cases with abnormal stool colors' since 2002 to the end of 2004. It also obtained the patent certificate for the 'baby stool color promotion card' (hereinafter referred to as the 'baby stool card') on August 1<sup>st</sup>, 2005. Currently the 'baby stool card' has already been placed into the Children's Health Manual so that Taiwan's new parents can compare and identify the color difference accordingly. When abnormal stool colors are found, they can call the inquiry line (02)2382-0886 for answers or referrals. On March 1<sup>st</sup>, 2006, under the support and assistance of the Center for Disease Control and the BNHI, the stool card reached yet another milestone – registered unto the immunization network so that newborns can be screened for stool colors when they are immunized against hepatitis B at one month old. Then the parents can tell the medical personnel of the babies' stool colors; or they can simply hand the stools in for examination by the medical personnel to avoid misidentification and thus delay of treatment. We hope that, besides health education about the newborn after they are discharged, parents can be reminded again during the immunization exercise to observe their babies' stool colors carefully, so as to fulfill the objective of detecting biliary atresia early and administer treatment in time. According to the data in 2006, in 94.4% of biliary atresia cases, abnormal stools can be found using the stool card in the 60 days after the baby is born. This is an improvement comparing to the 72.5% in 2004.

In order to promote the stool card to all of society, we have appointed the new-generation actress, Miss Liang Yu-lin, who is also a sufferer of biliary atresia, to be a public advocate for the stool card and to participate in the production of short promotional films on cholestasis. It is hoped that Miss Liang's personal experience of the illness can strike a chord with the general public and enable the entire society to pay attention to the meaning and importance of the 'baby stool card' in biliary atresia screening. It is also hoped that, through the comprehensive health education and

promotion, the 'baby stool card' can be put into practice in work concerning children's health and preventive care to safeguard the health of the nation's newborn citizens.

Note:

1. Extrahepatic biliary atresia: It is a progressive pathogenesis of the bile duct in newborns and causes blockage of the bile duct connecting the liver. Cholestasis within the liver will rapidly form liver cirrhosis. If untreated, death will result within two years.
2. Kasai's Operation: It was developed by the Japanese Dr. Kasai in the 1970s. It removes the fibrous bile ducts and shrunk gall bladder at the porta hepatis so the bile in the small bile ducts can be drained from the liver. A jejunum is then anastomosed to the porta hepatic, which has rudimentary bile ducts, to receive the drained bile.

