

# Innovative nation-wide screening, early diagnosis, and treatment plan for neonatal biliary atresia

**Author:** Liu, C.H., Pang, I.M.

## **Objective:**

To reduce neonatal death due to biliary atresia, an innovative early detection and treatment project was launched

## **Methods:**

Neonatal biliary atresia is always the most common hepatic cause of neonatal death. Its incidence is 3.7 per ten thousand in Taiwan, much higher than 0.4 ~ 0.8 per ten thousand in western countries. Surgery (Kasai's operation) is the only treatment but its optimal timing is within 60 days after birth. Delayed diagnosed or treated infants usually die before the age of two.

Taiwan had been using "Infant Stool Color Card" in every neonate's "Child Health Booklet" for years. It lets the parents identify and understand the importance of infant stool color. With the help of (parents') stool color records, pediatricians can identify neonatal biliary atresia and complete surgical treatment within 60 days after birth.

## **Results:**

By investigating insurance claim data from 2001 to 2007, Taiwan's National Health Insurance found that biliary atresia was diagnosed earlier and earlier every year. The average number of days of diagnosis was 56 days after birth in 2001, 46 days in 2007, and it further dropped to 35 days in 2008. The reduction of days from birth to definitive diagnosis is significant.

## **Conclusions:**

Taiwan's "Infant Stool Color Card" is very inexpensive, only a sheet of card. Yet it lets pediatricians successfully identify neonatal biliary atresia in the earliest days possible and put the affected infants through surgical treatment within 60 days after birth.