

## Critical Congenital heart disease screening in neonates in Thailand

Thanarat Layangool, MD

Queen Sirikit National Institute of Child Health,

College of Medicine, Rangsit university, Bangkok, Thailand

**Introduction:** Critical CHD is a group of severe CHD, which present in early neonate, difficult to diagnose by clinically before the babies become severely ill. It may causes unexpected sudden death in neonate. Many babies needed intubation and usually developed complications before referred to cardiac centers.

**Objective:** To find out the effectiveness of pulse oximetry screening for critical CHD in the neonates,

**Material & Methods:** Pulse oximetry screening program was implemented in 12 hospitals from 7 provinces in Thailand since April 2012. Until October 2013, there were 27,290 normal term babies, age > 24 hours, enrolled and screened according to the AAP guideline. Positive screenings without other explanation of cyanosis were urgently sent for echocardiogram. Negative screening cases would be informed to observe at home. The well being of the babies were checked via phone calls at 1-2 months of age, but if failed to contact, the survival would be checked from the network of the National Health Security Office of Thailand.

**Results:** There were 11 positive screening tests and echo confirmed the diagnosis of critical CHD (true positive). All cases were asymptomatic and received early treatment. There were 10 negative screening cases who were later diagnosed with critical CHD.

**Conclusions:** The rate of true positive of critical CHD from pulse oximetry screening is 0.4:1,000 live-births with sensitivity of 52% and specificity of 99.9%. Asymptomatic critical CHD babies can be detected, received early management and improved survival.

ท.ธรรมา  
6.2.17

เสนอโดยนายธนรัตน์ ลยางกูร นายแพทย์เชี่ยวชาญ สถาบันพระมงกุฎเกล้า  
ศิริราชพยาบาล

ในการประชุม 5<sup>th</sup> Congress of the Asia Pacific Pediatric Cardiac Society 2014

ซึ่งจัดขึ้นระหว่างวันที่ 6 - 9 มีนาคม ๒๕๕๗ ณ สาธารณรัฐอินเดีย