

## **One Case Of Thousands Of Cases: The Kantha Bopha Syndrome (KBS), Actually A Tuberculosis Disease (TB)**

We discovered this disease in 1994. Its main symptoms: horse voice, vomiting, convulsion, breathing difficulties. We could better understand this disease, which we called the Kantha Bopha Syndrome (KBS) after having installed the first CT Scanner in Cambodia, in the then brand new Hospital Kantha Bopha II in the Royal Palace in Phnom Penh in 1996. I remember very well: On the inauguration day of Kantha Bopha II 16 children with the symptoms of the KBS have died. By Ultrasound and CT scanner then we found inflammations of the small blood vessels (vasculitis) causing brain damages and pulmonary hypertension. The latter is causing a right heart hypertrophy. The children die from right heart failure or severe damages in the brain.

1997 we were convinced that the main factor of the KBS is TB. By then we could reduce its mortality rate from 65% down to 1% by the adequate treatment.

Today 25 children suffering from the KBS are hospitalized in our Hospitals. One of them is the following case.

Today we can prove the idea, that the KBS is a form of TB in infants of the age from 2 up to 10 month. We can prove it by our two MRI machines (3 TESLA). By these machines we can measure the mass of the metabolites by MR Spectroscopy (MRS). The TB germ is the only germ with the metabolite LIPID in its membrane. As soon there is a high quantity of TB germs (Abscess, Tuberculoma in the brain, etc), we can see in the Spectroscopy a peak of Lipid. We established this method the last three years, we could prove its 100% reliability and we could publish it in the European Journal of Pediatrics. As expected we find a significant peak of Lipid in the KBS. So it is proved, that the Kantha Bopha Syndrome is actually a Tuberculosis disease.

The infants being vaccinated by BCG are suffering from a more severe Kantha Bopha Syndrome. But still today WHO and Unicef are doing and propagating the BCG vaccination in the poor world! (Not in the rich world! There it is no more done, because it is not effective.) But for the poor it is good enough)

All treatment of our patients, the ambulant patients and the hospitalized patients, is free for all in pediatrics, same as surgery and maternity. In order to do a correct treatment you have first to do a correct diagnosis. All procedures of diagnosis for all are free too, including laboratory, imaging (CT Scanner, MRI, Ultrasound and X-ray). If it would not be free thousands of children would pass away month by month. Most families are most poor. All infants suffering from Kantha Bopha Syndrome would die.

Dr. Beat Richner, Head and Founder of the Kantha Bopha Hospitals

A 7-month old girl from Kampong Chhnang was admitted in ICU2 on 30 Jul 2013 with convulsions and rigidity spasm of the limbs since over 10 days.

BCG +

**Laboratory finding**

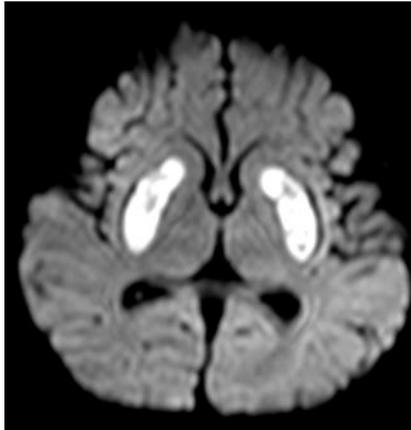
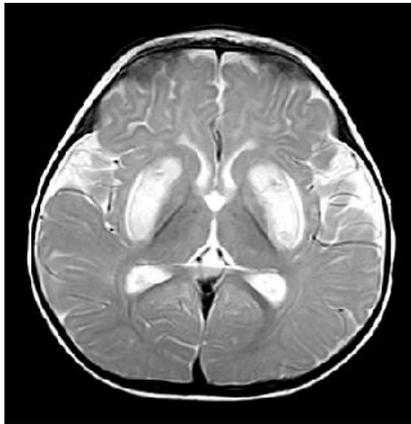
WBC 11,900 (PN 57%),

Ht 30%, Hb 9.7g/l

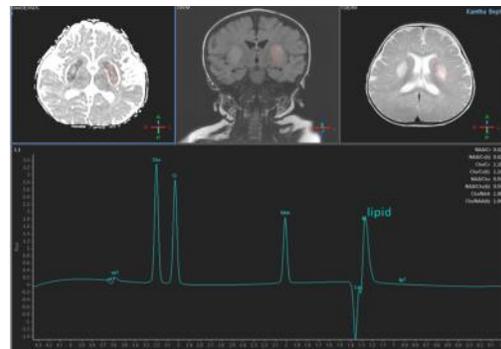
Platelets 585 000

Glycemia 3.4mmol/l, CRP 6.8mg/l

CSF in lumbar puncture: 4 cells, protein 0.15g/l, glucose 2.7mmol/l



Subacute infarctions of the basal ganglia



MRS of the infarct lesion shows significant lipid peak

MRI pictures with courtesy of Prof. Ky Santy,

Head of Radiology Department

Clinical Director of Kantha Bopha Hospital-Phnom Penh