THAVORN SUPAPROM : INCIDENCE OF CHROMOSOME ABNORMALITIES IN 1,000 CONSECUTIVE NEWBORN BABIES. THESIS ADVISER : ASSO. PROF. PANNEE CHINORUK AND COL. ARPORNPIROM KETUPANYA, M.D. 97 PP.

The incidence of chromosomal abnormalities was measured in 1,000 consecutive newborn infants at Pramongkutklao hospital during Febuary to June in 1987. Major chromosome abnormalities were found in 7 infants, so the frequency of infants with abnormal chromosomal constitutions was 0.73 Percent (incidence rate 7.30 Per 1,000). Only 4 infants were phenotypically abnormal to the extent that they could be diagnosed clinically : one boy with Patau syndrome (47,XY,+13), one girl with Edward syndrome (47,XX,+18), one girl with Down syndrome (47,XX,+21) and one girl with Roberts syndrome (46,XX with premature sister-chromatid and centromeric separation). It was remarkable that three infants with karyotypes 46,X inv.(Y), 46,XX with 14 dNOR and mosaicism of Turner syndrome (mos 45,XO/46,XX) were normal phenotypes. Chromosome variants (marker chromosomes) were found, the most common marker chromosomes were 9qh+, 14ph+, 16qh+, 22ph+ and Yqh+; very little is known about the significant of marker chromosomes. Chromosome examination in new born infant gives the possibility of procaring incidence figures, finding families with chromosome abnormal, studying segregating rates and giving genetic counseling.