Effect of caffeine citrate and aminophylline on clinical prognosis and brain neurodevelopment outcome in very low birth weight premature infants

CHA Lin, LIU Wei

(1. Department of Pediatric, Wuhan Puren Hospital, Wuhan 430081, China; 2. Department of Pediatric, Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan 430060 China)

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[Author]: CHA Lin (1980-), on-the-job Postgraduate Student, Attending Physician, E-mail: chalinek2010@163.com.

[Correspondence to]: LIU Wei, Professor, M.D., Tel: 13886116361, E-mail: chalinek2010@163.com.


View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To effect of caffeine citrate and aminophylline on clinical prognosis and brain neurodevelopment in very low birth weight (VLBW) premature infants. Methods: A total of 62 premature infants with VLBW were divided into observation group and control group. All infants were given with conventional nursing care and treatment. Infants in observation group were also given with caffeine citrate, infants in control group were add given with aminophylline. Therapeutic effect and prognosis, plasma β-EP level, neurodevelopment were compared. Results: Average administration time, disappearance time of apnea, the plasma β-EP levels in observation group were significantly lower than control group. MDI and PDI and Gesell score were significantly higher than control group (P< 0.05). Conclusions: Caffeine citrate and aminophylline can improve the clinical prognosis of VLBW premature infants. Caffeine citrate can promote neurodevelopment of premature infant brain.

[KEY WORDS] Caffeine citrate; Aminophylline; Very low birth weight; Premature infant; Neurodevelopment