RATIONAL: Cow’s milk allergy (CMA) is the most common food allergy in Thai children involving respiratory system more than others from previous study. We aim to evaluate clinical course of CMA children in our center and to compare with other previous studies.

METHODS: A 5-year retrospective cohort study revealed 172 CMA children. Diagnosis was made on the basis of history of symptoms clearly associated with exposure to cow’s milk (CM) and clear improvement with milk avoidance, and/or recurrence of symptoms after reintroduction of milk by oral challenge or by accidental ingestion.

RESULTS: CMA found in more boys than girls (116 vs. 56), with median age at diagnosis of 4 month-old and median age of onset of 2 month-old. Cow’s milk was first introduced at 14 day-old (1 day-1 year) causing immediate reactions within 7 minutes (2 minutes-2 hours) and late reactions within 30 days (5 hours-41 months). Organ system involvements were skin (64.3%), gastrointestinal (55%) and respiratory system (52.6%). There were 49.6% of patients having IgE-sensitization to CM and 1.2% having anaphylaxis. Patients could tolerate CM 22% by 1 year, 52% by 2 years, 72% by 3 years, 89% by 4 years of age, and remaining 92% up to 8 years. The prognostic factors for early tolerance were early onset age (p<0.002), no skin involvement (p<0.024) and non IgE-sensitization [p<0.004; hazard ratio 2.39 (95%CI 1.41-3.93)].

CONCLUSION: From this study, skin involvement was the most common manifestation in CMA children. Most of CMA patients outgrew within 4 years old esp. with non IgE-sensitization.