VARICELLA RELATED HOSPITALIZATIONS IN TURKEY, 2008-2010: A NATIONWIDE SURVEY AT PREVACCINE ERA (VARICOMP STUDY-1)

E.C. Dinleyici[1], Z. Kurugol[2], O. Turel[3], N. Hatipoglu[3], I. Devrim[4], H. Agin[4], I. Gunay[4], N. Bayram[5], A. Kizildemir[5], H. Tezer[6], H.H. Aykan[6], N. Dalgic[7], B. Kilic[7], G. Sensoy[8], N. Belet[8], N. Uygur Kulcu[9], A. Say[9], E. Ciftci[10], E. Ince[10], H. Ozdemir[10], M. Emiroglu[11], D. Odabas[11], Z.A. Yargic[1], C. Nuhoglu[12], K.B. Carman[12], S. Celebi[13], M. Hacimustafaoglu[13], U. Celik[14], M. Kondolot[15], M. Ozturk[15], A. Tapisiz[16], M. Ozen[17], H. Tepeli[17], A. Parlakay[18], A. Kara[18], A. Somer[19], B. Caliskan[19], S. Velipasalioglu[20], S. Oncel[21], E.S. Arisoy[21], E. Guler[22], T. Dalkiran[22], D. Aygun[23], S. Akarsu[23], VARICOMP Study Group

[1]Eskisehir Osmangazi University Faculty of Medicine, Eskisehir, [2]Ege University Faculty of Medicine, Izmir, [3]Bakirköy Maternity and Children's Hospital, Istanbul, [4]Dr. Behcet Uz Children's Hospital, [5]Tepecik Teaching and Research Hospital, Izmir, [6]Ankara Diskapi Children's Training and Research Hospital, Ankara, [7]Sisli Etfal Training and Research Hospital, Istanbul, [8]Ondokuz Mayis University Hospital, Samsun, [9]Zeynep Kamil Hospital, Istanbul, [10]Ankara University Faculty of Medicine, Ankara, [11]Konya Training and Research Hospital, Konya, [12]Haydarpasa Numune Training and Research Hospital, Istanbul, [13]Uludag University Faculty of Medicine, Bursa, [14]Adana Children Hospital, Adana, [15]Erciyes University Faculty of Medicine, Turkey, [16]Gazi University Medical School, Ankara, [17]Suleyman Demirel University Faculty of Medicine, Isparta, [18]Hacettepe University, Ankara, [19]Istanbul University Istanbul Medical Faculty, Istanbul, [20]Akdeniz University Faculty of Medicine, Antalya, [21]Kocaeli University Faculty of Medicine, Kocaeli, [22]Kahramanmaras Sutcu Imam University Faculty of Medicine, Kahramanmaras, [23]Firat University School of Medicine, Elazig, Turkey

Aim: While usually self-limiting, varicella can develop potentially serious complications requiring hospitalization. The aim of this study was to identify varicella complications in children and assess the hospitalization rates in the pre-vaccination era in Turkey.

Methods: We retrospectively evaluated medical records of hospitalizations due to varicella from 24 tertiary care centers of 14 cities between October 2008-October 2010.

Results: 640 children (3 days-216 months, 357 boys-283 girls, 23.4% have underlying conditions) have been reported during this two year time period (325 cases between October 2008-September 2009; 315 cases between October 2009-October 2010). 18.6% of children hospitalized with the diagnosis of serious varicella infection. 6.7% of children have been hospitalized due to poor feeding with/without dehydration. 38.4% have secondary bacterial infections (including GAS bacteremia), 17% have skin superinfections, 13.8% have neurological complications, 5.5% have hematological complications, 18.1% have respiratory complications (viral/bacterial pneumonia, acute asthma exacerbations). Febrile convulsion reported as 7.8%, acute cerebellar ataxia 5.2% and encephalitis as 4.5%. 10 patients needed to intensive care and mechanical ventilation. 66.4% of children have been received acyclovir. 5.1% have been received intravenous immunoglobulin. Median hospitalization stay was 5 days (1-45days). Prognosis was favorable except for 7 cases: 5 serious sequel and 2 deaths have been reported(0.4%).

In conclusion, mortality associated varicella in Turkey was low, the hospitalizations rates relatively high, and the number of serious complications remarkable. Introduction to varicella vaccine to expanded immunization program is a better option to prevent these complications. Further guidelines to define and treatment of complicated varicella infections also needed.