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Incidence of Intussusception in Children Less than 2 Years

Muna Al Musawi, MBBch, FMSC, DPM* Saeed Jaffer Alhindi, MD, CABS, FRCSI** Sameh Anis, MD, DCH *** Robert Pawinski, MBChB, Dip (OBST), DTMH, MSc****

Background: Surveillance of baseline incidence of intussusception (IS) in children less than 2 years of age is important for the safety monitoring of second-generation rotavirus vaccines.

Objective: To estimate the incidence of IS in children aged less than two years, before the implementation of rotavirus vaccination as part of the routine immunization program in Bahrain.

Setting: Salmaniya Medical Complex (SMC), Kingdom of Bahrain.

Design: Retrospective Study.

Method: Children aged <2 years with definite IS were identified by daily reviews of the medical records at Salmaniya Medical Complex. The annual incidence of IS was calculated for children aged <1 year and 1-2 years, using the number of subjects with definite IS residing in the study area as numerator and the study area population aged <1 year and 1-2 years, respectively, as the denominator.

Result: Twenty-one children, 10 males and 11 females, were diagnosed with definite IS (2004–2006). The incidence of IS ranged from 35.4-56.3 per 100,000 children aged <1 year and from 6.7-21.7 per 100,000 in children aged 1–2 years (overall 23.4-39.2 per 100,000 children aged <2 years). Sixteen (76.2%) IS cases occurred in children aged <1 year; incidence peaked between 5–8 months of age. IS cases demonstrated no seasonality. Twenty (95.2%) children had abdominal pain and 17 (81%) had vomiting. No deaths were reported.

Conclusion: Incidence of IS in Bahrain reveals a decreasing trend from 2004 to 2006. The incidence was high in the first year of life. These baseline data on IS incidence will facilitate the risk/benefit assessment of rotavirus vaccination once it is routinely used for immunizing infants in Bahrain.

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