Correspondence

Actiology of childhood viral gastroenteritis in Lucknow, north India

Sir,

I have two comments on the interesting study by Gupta *et al*¹. First, the author stated that rotavirus (RV) was the leading cause of viral gastroenteritis (GE) with a positivity rate of 16.6 per cent in the hospitalized children and 8.3 per cent in non-hospitalized children¹. This seems worrisome considering the significant morbidity and mortality of RVGE as well as the economic burden on Indian families. Apart from improving sanitary standards and access to the healthcare services, the following two points need to be considered by policy makers to contain the sizable magnitude of RVGE in India. (i) Data from developed and developing countries have shown that RV vaccine substantially reduces morbidity and mortality among children. Implementation of RV vaccine has resulted in 70-100 per cent reduction in emergency department visits and hospitalizations of children with RVGE². To the best of my knowledge, RV vaccine is not yet incorporated into the routine immunization schedule in India. However, an indigenously produced RV vaccine (ROTAVAC, Bharat Biotech International Limited of India) has been recently developed³. In a randomized, double-blind, placebo-controlled trial, it has been shown to be effective in preventing severe RVGE in Indian children³. The introduction of RV vaccine into the Universal Immunization Programme is solicited to be shortly implemented in India. (ii) Since RV strains circulating in the Indian population are diverse⁴, continuous surveillance for the prevalence and monitoring of the circulating genotypes is needed to assess the disease burden and evaluate the efficacy of RV vaccine.

Second, though norovirus (NoV) was reported in low prevalence in the hospitalized children (1.2%) in this study¹, it is now considered the dominant aetiological agent of acute GE, and with the recent introduction of RV vaccines in many developing and developed countries, this is likely to remain the case. NoV has a significant impact on human wellbeing in terms of morbidity, economic costs, and mortality. There are six genotypes of NVs (GI-GVI), but only GI, GII, and GIV are known to infect humans, with GII being the most prevalent, causing >95 per cent of human infections⁵. Despite the recently published single center study in south India has revealed that NoV GII infections is an important cause of paediatric GE and genetic diversity of circulating strains⁶, regular surveillance for the NoV genotypes affecting paediatric population in India is still crucial to determine the foreseeable burden of NoV infection on one side and guide the potential development and introduction of NoV vaccine at the national level on the other.

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