

ABSTRACT

Background:

Intussusception, a rare adverse event associated with rotavirus vaccines in some settings, is a common cause of intestinal obstruction in infants and toddlers globally with a peak age of 4–6 months. This age group may overlap with the extended age of administering rotavirus vaccine.

Methods:

A retrospective (January 2007 to June 2009) and prospective (July 2009 to June 2012) survey was conducted in 9 Zambian hospitals. Children between 0 and 24 months who were operated on for intestinal obstruction/intussusception were identified in theatre log books. In the latter part of the survey, patients were recruited prospectively. Demographic, clinical and surgical data from hospital files were collected for each patient.

Results:

One-hundred and five children were identified to have undergone surgery for intussusceptions. Many were boys 57.6% (57/99). Of those with complete data, intussusception was common in infants 86.9% (86/99) and many children (68.0%) were between 3 and 8 months of age with a peak age of 5–6 months. Lusaka had the highest number of children with intussusception with an estimated annual incidence rate of 12/100,000 in children <2 years of age. The overall case fatality rate was very high 33.7% (31/92).

Conclusion:

Intussusception was common in infants with a peak age of 5–6 months, and of particular concern is the group of 2–4 months the age of rotavirus vaccination. The estimated incidence rate of 12/100,000 is an underestimate as many cases may not present for care. The high case fatality rate of 33.7% is due to both delayed presentation and diagnosis in hospital