RESPIRATORY ILLNESS ASSOCIATED WITH ENTEROVIRUS D68 IN SÃO PAULO BRAZIL

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BACKGROUND

ENTEROVIRUS D68 (EV-D68) differs from most other EV types in that it is primarily associated with respiratory illness and,, is biologically similar to Rhinovirus. Since its discovery in California in 1962 the detection frequency of EV-D68 has increased in different parts of the world, and EV-D68 is now recognized as a reemerging pathogen. In August, 2014, two paediatric hospitals in the USA reported increases in the number of patients with severe respiratory illness, with an over-representation in children with asthma. However, the epidemiological profile and clinical significance of EV-D68 is yet to be defined, and the virological characteristics of EV-D68 are not fully understood. Recent studies have revealed EV-D68 is detected among patients with acute respiratory infections of differing severities ranging from mild upper respiratory tract infections to severe pneumonia including fatal cases in pediatric and adult patients in different countries

METHODS

We screened 715 children < 2 years old with acute respiratory tract infections admitted to an urban hospital for respiratory virus using polymerase chain reaction (PCR) assays. We retrospectively analyzed the cases diagnosed as EV-D68. The chart reviews evaluated medical history, clinical presentation, and hospital course.

RESULTS

EV-D68 was detected in nasopharyngeal specimens in 7 children 5 male and 2 female. All of the children have wheezing as the main symptom. In 3 of these patients EV-D68 was associated with other respiratory virus. One child was admitted in intensive care. Patients with diagnosis of EV-D68 infection had similar medical histories and clinical presentations comparing with children with other viral respiratory infections.

Clinical Diagnosis	Antibiotic Treatment	Age (months	Gender	Int. Care Uni	Other Resp virus	Hospitalization days
BQL	Y	3	FEMALE	N		9
BE	N	11	MALE	N	HPIV	44
BE	N	7	MALE	Y	RSV	7
BE	N	22	FEMALE	N	RSV	3
PNM	Y	14	MALE	N	RSV	5
PNM	Y	10	MALE	N		7

Conclusions

Patients presenting with wheezing and EV-D68 infection had similar medical histories and clinical presentations compared to oher respiratory virus infections