

CLINICAL CHARACTERISTICS AND SERO-EPIDEMIOLOGIC PROFILE OF DENGUE INFECTIONS AMONG DENGUE VACCINATED CHILDREN SEEN AT THE PHILIPPINE CHILDREN'S MEDICAL CENTER

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INTRODUCTION

Dengue is endemic in the Philippines and is one of the most important vector-borne disease globally. The dengue vaccine was introduced in the sub-national immunization program but was prematurely discontinued following a report from the manufacturer of possible safety signals among seronegative recipients.

OBJECTIVES

To determine the demographic and clinical profile of admitted children immunized with CYD-TDV vaccine and its association with severe dengue.

METHODS

A Cross-sectional analytical study with a sample size of 46

Admitted CYD-TDV vaccinated (9-18 years old)

Clinical and sero-epidemiologic characteristics were obtained

A data abstraction tool was used during chart review

Data recording and analysis

RESULTS

Included participants were mostly grade 8 students with a mean age of 11.7 years. Majority (71.42%) acquired the disease in the community. Ninety three percent had no history of previous infection and had only 1 dose of the vaccine. Clinical course of admitted patients was consistent with dengue fever. Serotype 3 was the most common infecting serotype.

Out of the 46 patients, 9 were classified as severe dengue, but all patients improved including one patient who underwent hemoperfusion due to complications.

Number of vaccine doses received [1 dose ($OR=0.53$, $95\%CI=0.12-2.35$, $p=0.40$); 2 doses ($OR=2.36$, $95\%CI=0.36-15.5$, $p=0.58$); 3 doses ($OR=1.22$, $95\%CI=0.21-7.22$, $p=1$)], history of previous dengue infection ($OR=10.28$, $95\%CI=0.82-9.56$, $p=0.09$), and serotype [DEN-4 ($OR=0$, $95\%CI=Undefined$, $p=1$); DEN-3 ($OR=2.35$, $95\%CI=0.51-10.86$, $p=0.46$); DEN-2 ($OR=10.29$, $95\%CI=0.82-129.56$, $p=0.09$)] were not associated with disease severity.

CONCLUSION

Among patients given CYD-TDV vaccine, bivariate analysis showed no significant association between dengue severity, the number of doses received, history of previous infection, and infecting serotype.

KEYWORDS: CYD-TDV, dengue, severe dengue, dengue serotype