

Choice of vaccine and study of the careful use of pharmacy during the introduction of rotavirus vaccine in DRC

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Introduction

A feasibility study has been initiated in August 2009 by the extended program of vaccination in the Democratic Republic of Congo in collaboration with some partners to evaluate the scale of the Rotavirus diarrhoea in the children under five years. This study was funded by the World Health Organization, WHO in acronym, presents the results of these last ten years under medical supervision have revealed that more than 65% of case of hospitalization of the children under five 5 years suffering from of the diarrhea due to Rotavirus hence the need to introduce the vaccine into the country in order to reduce impacts of this disease on the children under five years.

Objective

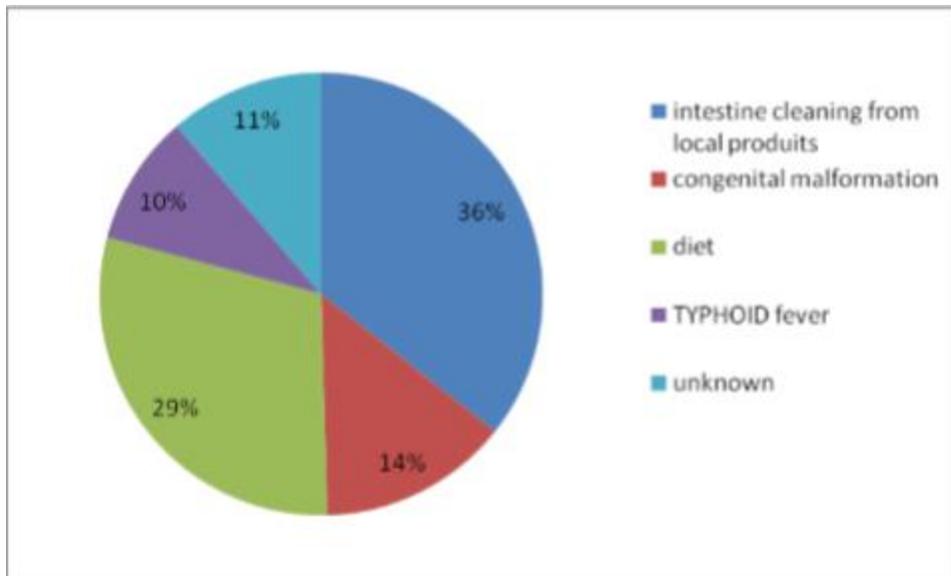
The extended program of vaccination decide on two types of vaccines taking into account results of the strain spreading circulating detected in DRC, (the strain of Rotavirus usually detected by RT-PCR are: G1P[8], G2P[6], G1P[6], and G2P[2]), associated to other strains whose the scale is insignificant. It is about Rota Teq (Sonafi MSD Pastor) and Rotarix (GlaxoSmithKline/GSK laboratories), two vaccines turned out to be very effective to fight against the Rotavirus diarrhea. We focused on the study of adverse reactions of these two vaccines; the most dangerous is the case of the intestinal invagination in the children under five years.

Methodology

We carried out a retrospective study of 6 last years on the cases of intestinal invagination taken into care by the Pediatric Hospital of Kalembe Lembe in the children under 5 years their causes and impacts, before the introduction of Rotavirus vaccine in DRC,

Results

From 2012 to 2017, it comes to a total of 1,240 cases treated in surgery, 115 cases of acute intestinal invagination that is 9 % made known, 107 surgical operations, 46 cases of death i.e. 40%. Although these vaccines are not scheduled for vaccinal dates, but they are marketed in DRC. The noticeable causes of intestinal invaginations are: cleaning of the intestines from local products 41 cases with 13 deaths; congenital malformation 16 cases with 8 deaths; 34 cases with 11 deaths cused by food; typhoid fevers 11 cases with 3 deaths; other cases remain unknown without any cause 13 cases with 11 deaths. No case made known after using Rotavirus vaccine.



Conclusion

The intestinal invagination turned out to be rare adverse reactions, but significant, anti rotavirus vaccine of the first generation. New Rotarix and Rota Teq vaccines were each one another the subject of study of great scope designed to exclude a risk of intestinal invagination similar to that observed with the RotaShield. In these studies, no greater risk of intestinal invagination highlighted. Post-marketing studies were carried out in a certain number of countries. Apart from the weak risk of intestinal invagination (about 1-2 for 100 000 vaccinated new-born babies), we consider that the current antirotavirus vaccines are sound and safe for use, it is up to the doctors to appreciate intestinal invagination case by case.