Contribution of abdominal ultrasound in the diagnosis of acute intussusception in Ivory Coast

Hamidou KONE1, Catherine BONI CISSE2, Nicaise AKA1, Flora ZABA3, Alice MLAN3, Kofi N'ZUE4, Jason MWENDA. 1 EPI, Ivory Coast 2 Department of Bacteriology-Virology, Institut Pasteur, Ivory Coast 3 Department of Bacteriology-Virology, Central Laboratory, CHU Yopougon, Cote D'Ivoire. 4 WHO, Ivory Coast 5 WHO - Afro

Justifications
Rotavirus is the most common cause of severe diarrhea in children under 5 years of age. The morbidity and mortality associated with this condition can be avoided by vaccination, which however is not without risk. Hence the need to monitor the occurrence of intussusception following immunization with rota-vaccine. In Côte d'Ivoire, this surveillance was implemented in 2017 in 20 health regions. This surveillance was based on the early ultrasound diagnosis of intussusception. The objective of this study was to evaluate the contribution of abdominal ultrasound in the early diagnosis of acute intussusception.

Methods
This is a descriptive study of children aged 0 to 11 months vaccinated against Rotavirus (Rotateq) who presented acute intussusception following immunization by rotateq vaccine. The parameter studied is the number of cases detected by abdominal ultrasound in each health region from march 2017 to march 2019.

Results
Twenty (20) regions were identified for monitoring acute intestinal intussusception in Côte d'Ivoire, of which only four (04) reported cases during the study period. A total of 64 cases of acute intestinal intussusception were reported, the majority were (67%: 43/64) in Abidjan. The diagnosis of 100% of cases, was made using abdominal ultrasound. In fact, the 04 regions that have reported cases are equipped with high-performance ultrasound equipment and radiologists for early diagnosis of cases, unlike the other 16 regions.

Conclusion
The existence of a radiologist with a powerful ultrasound machine is an asset for the early diagnosis of acute intussusception.