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Towards the elimination of malaria in Mayotte?

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Mayotte, a French department in the Indian Ocean, is one of the 4 islands of the Comoros archipelago, a zone of permanent malaria transmission, almost exclusively by Plasmodium falciparum. Faced with a regular increase in malaria morbidity and mortality, the island's health authorities have put in place several successive measures to strengthen the fight against malaria since the end of 2001. Diagnostic and therapeutic means have been improved according to WHO recommendations, epidemiological surveillance has been set up and vector control has been reinforced. Is this malaria control programme effective?
From 2002 to 2020, 4819 locally acquired cases were reported in Mayotte where the annual incidence decreased from 10.3‰ in 2002 (1649 cases) to less than 0.01‰ in 2020 (2 cases). During this period, 1879 imported cases were observed. They mainly came from the Union of Comoros (85.8%), Madagascar (8.6%) and sub-Saharan Africa (5.6%).
Since 2010, the incidence of locally acquired cases has been less than 1‰. In 2014 the WHO classifies Mayotte as a territory in the malaria elimination phase. From 2017, the annual number of locally acquired cases is less than 10 and decreases steadily (9 cases in 2017, 5 in 2018, 4 in 2019 and 2 in 2020).
The temporo-spatial distribution of these rare locally acquired cases suggests that they are introduced and not indigenous cases. The study of the genotypic profile of the plasmodial strains of the locally acquired cases observed in 2017 and 2018 confirms that they are certainly introduced cases in association with cases imported from the neighbouring Union of Comoros.
The last locally acquired case was notified in Mayotte in July 2020. Given the characteristics of the malaria parasite cycle, the lack of malaria immunity in the population of Mayotte and the longevity of the anopheline vectors, it is reasonable to assume that indigenous malaria transmission has been interrupted in Mayotte.
The end of indigenous malaria transmission seems to be a given in Mayotte, but the island remains under the threat of reintroduction via imported cases from neighbouring countries. It is time to develop a local plan to prevent reintroduction and to implement a proactive policy of regional cooperation in the fight against malaria.