From Paraguay to Cuba: outbreak-driven imported chikungunya and its implications in the Vaccine Era

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Background: Chikungunya is a major public health concern due to its high symptomatic rate and potential progression to chronic disease. Up to 43% of patients develop chronic inflammatory manifestations, persistent arthralgia, fatigue, and depression, significantly impairing quality of life. Diagnosis is challenging in non-endemic settings because of clinical overlap with other arboviral infections. Increasing global mobility and expansion of Aedes vectors have created a new epidemiological scenario in Europe, where imported cases represent a growing clinical and public health challenge. The recent introduction of chikungunya vaccination in Europe may reshape prevention strategies.

Methods: single-centre retrospective descriptive study including all confirmed chikungunya cases managed at a Spanish National Referral Unit for Imported Diseases between January 2024-December 2025.

Results: Among definitively diagnosed patients, 64 met the minimum dataset for analysis. Median age was 43.8 years, and 70% female. Most were visiting friends and relatives travellers returning from LatinAmerica, predominantly Paraguay and Cuba, reflecting major outbreaks during the study period. An epidemiological shift was observed, with Paraguay predominating in 2024 and Cuba in 2025, underscoring the outbreak-driven nature of imported chikungunya. A substantial proportion required specialised follow-up due to prolonged manifestations.

Conclusions: Imported chikungunya is no longer exceptional. In Spain, where strong LatinAmerican ties coexist with established Aedes vectors, viral importation poses a risk of autochthonous transmission. Given its chronic morbidity and public health implications, vaccination strategies and specific management protocols have been integrated into our Reference Unit. Ongoing surveillance will further define its evolving clinical and epidemiological impact.