

can also worsen pre-existing chronic inflammatory rheumatism and lead to intensification of the treatment (adjunctive steroid course, change background drug; unpublished). However, so far, no evidence shows that chikungunya can induce or worsen osteoporosis, except after prolonged courses of systemic corticotherapy.

Because international travel is an increasing source for chikungunya infection, persisting musculoskeletal disorders or rheumatic diseases are now reported in travellers returning to non-epidemic countries months to years after the acute stage.⁴ We believe that travellers should be warned that chikungunya is not a negligible risk because of its biphasic evolution. Patients older than 70 years or suffering underlying diseases (cardiovascular, respiratory, neurological disorders, or systemic lupus) are at higher risk for complication or death in the acute stage. In the same way, an unfavourable rheumatic outcome with long-term impairment of quality of life is predictable after chikungunya for patients with one of several criteria: female sex, age older than 45 years, and any pre-existing osteoarticular disease (mostly degenerative osteoarthritis).^{3,5}

Considering this point, travelling in an epidemic area should be discouraged for patients who are highly susceptible to acute complications or long-lasting arthritic diseases; if the travel cannot be cancelled or postponed, all measures to prevent diurnal mosquito bites are recommended: long clothes, repellents, bednets, insecticides, and air conditioning.

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Cases of chikungunya in the Americas are increasing substantially.^{1,2} As noted by Felicity Burt and colleagues,¹ spread and establishment of the virus in new endemic regions will be dependent on availability of competent vectors and a source of the virus, but also on other factors.

A complication from a Latin American perspective is that health systems are very heterogeneous. Although some have achieved excellent results in control of other vector-borne diseases (eg, onchocerciasis in Colombia or malaria in Chile), there have, unfortunately, been setbacks in communicable disease control.³ Could Latin America control the dissemination of the chikungunya disease in view of the current epidemics?

Even in Chile, a Latin American country with high incomes and development, could not control dengue across all its territory. Dengue epidemics have substantially affected Chilean citizens in Easter Island. Nothing assures that this might not occur in same way with chikungunya.⁴ Moreover, countries that in past decades controlled vector-borne disease, such as Venezuela for malaria, are now failing to control them.³

In 2010, an epidemic of chikungunya was noted in Europe in areas such as

southern France, which has a similar climate to that of southern South America. This epidemic highlights the possibility that chikungunya infection could reach countries such as Argentina, Chile, and Uruguay—with not only imported cases but also with transmission, since the vector is present during warm seasons.⁵ Accumulation of imported but particularly autochthonous cases in some Latin American countries has happened quickly (figure). In Puerto Rico, the number of autochthonous cases increased from 48 during week 27 (July, 2014) to 2305 at week 40 (October, 2014).

In the other countries of Latin America, where the existence of mosquitoes is endemic, the doubts about the control of the disease are even greater because of the inability of vector control. Importantly, chikungunya is highly symptomatic, so if governments could coordinate policies in early detection of cases, disease expansion would be mitigated. More joint efforts of Latin American countries are needed, in addition to regional efforts of the Pan American Health Organization, to provide and establish guidelines and policies.

There are more elements of concern in the current stage of this disease for Latin America, but a call for collaboration and search for health policies must exist, particularly in view of the increasing number of people travelling to and from Latin American countries.

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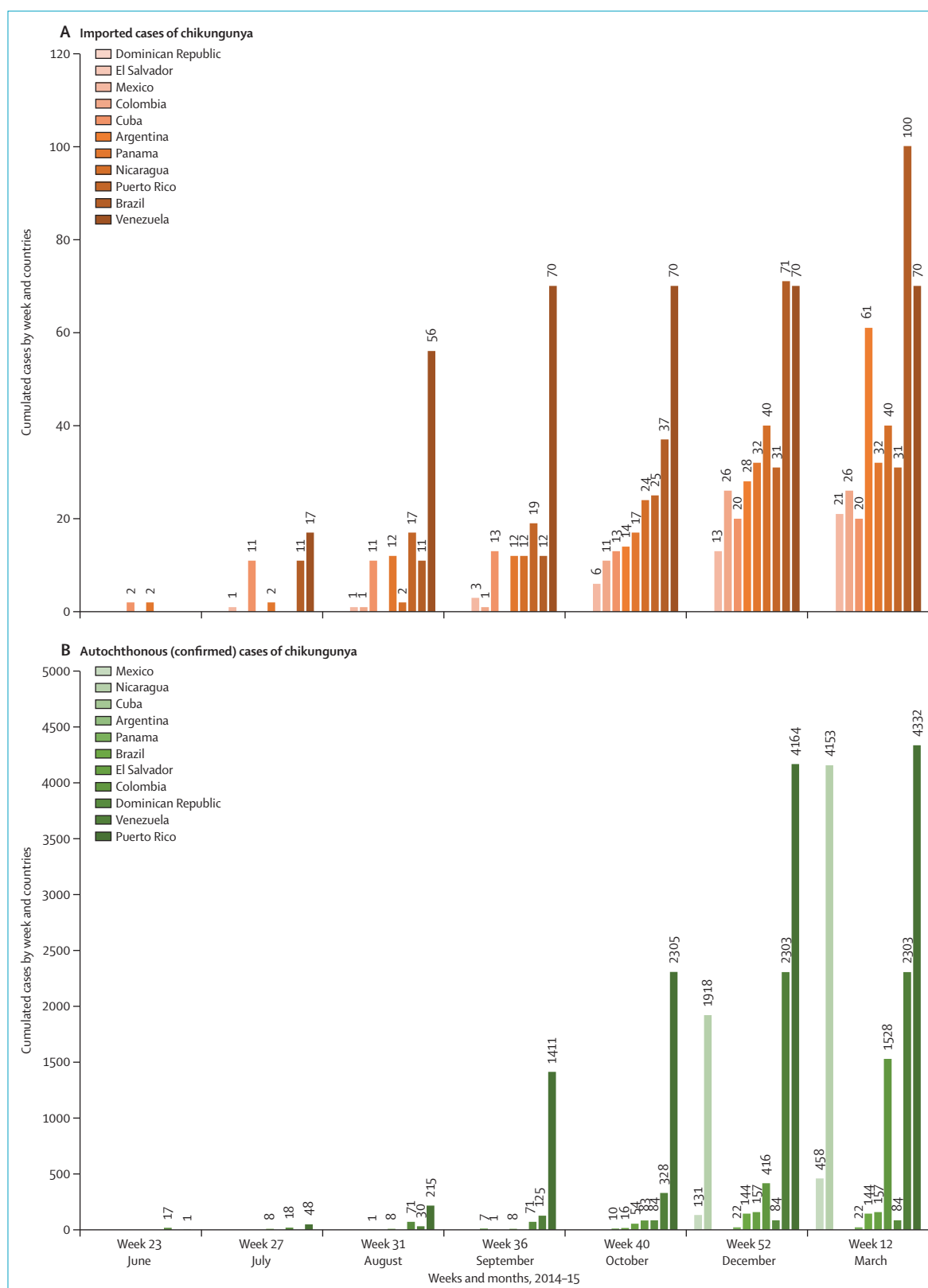


Figure: Change in the cumulated number of chikungunya cases in selected Latin American countries, June, 2014 to March, 2015

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Treating infestations of the human botfly, *Dermatobia hominis*

Myiasis caused by *Dermatobia hominis* is common in residents and visitors to the tropical regions of the Americas.¹ In a review of tropical myiasis, John McGarry² discussed *D hominis* and stated: "The slowly growing, often painful boil-like furuncular lesion that results contains a deeply embedded maggot, which requires surgical removal."

In some instances, surgical removal of the larvae is necessary—eg, very large late-third-instar larvae that are otherwise difficult to expel, ocular

involvement,³ or scalp infestations in very young children in which a risk of a potentially fatal cerebral myiasis exists.

However, in almost all cases, surgery is not necessary. In Belize, where I have extensive experience in this area (including my own *D hominis* infestations), most cases in residents and in researchers and experienced ecotourists, are handled by the individuals themselves. They simply suffocate the larva by the application of occlusive substances⁴ (eg, nail polish, petroleum jelly, bacon fat, or plant extracts) to the opening in the skin through which the larva breathes; 24–48 h after application, the larva deflates, collapsing the retrorse spines. The larva can then be expelled by applying pressure around the cavity to extract it.

Alternatively, individuals can use a snake-venom extractor to remove the moribund larva.⁵ The earlier an infestation is treated, the easier and safer the removal—an argument in favour of much better travel counselling of tourists travelling to endemic areas.

I summarise with a plea to medical professionals in the developed world

to abandon publication of a case report of every instance of *D hominis* encountered. The medical literature is filled with repetitive case reports that add nothing to the treatment protocols or to the knowledge of the biology of the insect. A case report of *D hominis* warrants publication only if a new treatment option is discussed or if previously unknown features of the biology of the insect have been uncovered.

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