Leishmaniasis Recidivans in Pediatric Patients

To the Editors:

Due to the war in Syria, the epidemiology of leishmaniasis and species distribution of the causative agents are rapidly changing as a result of migration of refugees from Syria to neighboring Turkey and the other countries. Unusual manifestations of the disease frequently occur, which complicates the diagnosis and treatment. This letter aims to reflect our experience with leishmaniasis recidivans (LR) in pediatric cases, the most prevalent group for cutaneous leishmaniasis (CL).

LR is a rare clinical form that occurs following years after resolution of localized CL because of reactivation of the dormant parasites.[1] In the Old World, LR is usually caused by *Leishmania tropica*, the main causative agent for CL in Turkey, an endemic country.[2] The scarcity of the parasites in skin biopsy complicates the diagnosis, especially for patients in a nonendemic region. The lesions become destructive and disfiguring after many years because most of the patients may be resistant to regular treatment.[1]

The pathogenesis of LR is still unclear. Receiving incomplete course of treatment may play a role in resistance and recurrence of the lesions. The host immunologic status, especially defective Th1-type immune response, can also result in reduction of parasitic clearance.[3]

In our study covering 14-years and 8786 patients, we observed LR in 2,·29% of the pediatric CL patients, most commonly in 0 to 5-year-old group (4.34%). A more immature immune system relative to older children could explain this observation. This age group responded better than other groups to intralesional treatment, although follow-up observation is required because they were more prone to develop recidivans.[2] Surprisingly, Sharifi et al[1] reported more prevalent LR in the 6 to 10-year-old group.

We observed that the population in the refugee camps mostly consists of pediatric age groups. Thus, pediatric population is at risk of the diseases, indirectly LR.

In LR, the high rates resistant to the first line drugs necessitate new treatment alternatives. Successful results have been observed with combination therapies.[4] Another recommended method is immunomodulatory therapy for LR.[3] We suggest inducing the immune system to increase parasitic clearance or inhibiting the parasite-driven milieu which promotes parasite survival.

Our experience and some studies using thermotherapy, such as radiofrequency, thermotherapy and hand-held exothermic crystallization thermotherapy showed highly effective clinical cure rates in CL.[5] Subsequently, a thermotherapeutic approaching can overcome the treatment problem in LR cases because of thermo-sensitivities of the dermatotrophic *L. tropica* species.

Considerable progress has been made during the past decades to develop a vaccine against leishmaniasis. Depending on local epidemiologic data vaccine should be given priority for LR for children.

In conclusion, LR is an important clinical manifestation of CL with its higher morbidity, more duration to recover and more resistance to the standard therapy regimens. Local epidemiologic data should be considered in treatment decisions.

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Perinatally Acquired Chikungunya Infection

Reports From the Western Hemisphere

***To the Editors*:**

We welcome the report of Rodriguez-Nieves et al[1] of 10 new putative cases of perinatally acquired chikungunya virus (CHIKV) infection from 3 pediatric centers in Puerto Rico. However, we were surprised to see the authors imply that this was the first report of perinatally acquired chikungunya in the Western Hemisphere. This priority claim, instead of generating interest in a study, tends to trivialize the findings. In addition, such statements may offend authors whose earlier papers on this topic may have appeared elsewhere. We believe that clarification is needed with respect to other published studies on perinatal chikungunya in the Western Hemisphere during 2015–2016.

Since December 2013, Chikungunya epidemics affected the Western Hemisphere, particularly Caribbean and Latin America with approximately 3 million cases reported to the Pan-American/World Health Organizations. Just in Colombia, more than 1 million cases were notified between 2014 and 2016. In its Sucre department (state), 8 babies with a confirmed perinatally acquired chikungunya (either documented with reverse transcription polymerase chain reaction and/or serology) were reported as early as August 2015.[2] A few months later, at its Santander department, 1 additional case was observed in a 12-month period with the aim of detecting psychomotor residual sequelae.[3] In July 2016, 2 novel cases were documented (with reverse transcription polymerase chain reaction confirmation both in serum and urine) in Salvador, Brazil.[4] In these case series, as with others,[2–4] attention was paid to life-threatening complications

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requiring support of vital functions in the neonatal intensive care unit, such as meconium-stained aspiration pneumonia, sepsis, necrotizing enterocolitis, severe respiratory distress, myocardiopathy, encephalopathy or bullous dermatosis.[2–4] In September 2016, the first initiative of data sharing was published as a multicenter study conducted in 4 large regional maternity units from 3 different countries in Latin America.[5] The report included 169 newborns observed in El Salvador, Colombia and Dominican Republic. The clinical presentations presumably due to the Asian lineage of CHIKV were consistent with those previously reported from Reunion Island[6] with a lesser incidence of neurologic disease but a higher case fatality rate than expected with the Indian ocean lineage.[5] Finally, adding the 10 cases of Rodriguez-Nieves et al[1] summarizes the Western Hemisphere experience with at least 180 published cases gathered from 5 countries.

Chikungunya represents a substantial risk for neonates born to symptomatic parturients during outbreaks in the Americas, with important clinical and public health implications. Despite efforts to better control the disease, CHIKV transmission still occurs, with more than 300,000 new cases in 2016 in the region. More research is needed as several knowledge gaps remain. These include the study of interactions between the circulating arboviral pathogens and the comparison of CHIKV genotype-specific neurovirulence on long-term neurodevelopmental outcomes to learn whether the Asian lineage could be also associated with poor neurocognitive performances, as observed after infection with the Indian Ocean Lineage.[6]

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