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Travel history is important!-A Case of *T. cruzi* Identified by Placental Examination

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Figures 1

Precise: A rare case of placental *Trypanosoma cruzi* is presented

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Dear Editor:

A recent twin placenta revealed an unexpected diagnosis of *Trypanosoma cruzi* (*T.cruzi*). In retrospect, the mother was recalled to be Argentinean and to have intermittently resided there.

A dichorionic-diamniotic twin pregnancy with preterm premature rupture of membranes delivered at 24 4/7 weeks. Twin A had had ascites, pleural effusion, and intrauterine growth restriction (IUGR). Twin B had mild ventriculomegaly. Both twins expired within hours of birth.

Placenta A showed acute chorioamnionitis , funisitis and erythroblastosis. Placenta B showed acute chorioamnionitis, necrotizing villitis, and numerous villous amastigotes within pseudocysts in necrotic foci(fig 1). Immunohistochemical and PCR assays for *T.cruzi* were positive.
At autopsy, both twins showed extensive extramedullary hematopoiesis, erythroblastosis, and rare *T. cruzi* organisms.

Congenital Chagas disease is endemic in Argentina, transmitted hematogenously through the placenta.[1] Placental inflammation may be acute, chronic, or granulomatous, and often necrotizing. The organisms may be present in villous trophoblast and Hofbauer cells,[1,2] . Fetal organisms may be within the reticuloendothelial system, smooth muscle , and heart, with associated myocarditis. Congenital Chagas can also present with megaesophagus or megacolon.

Most pregnant women with *T. cruzi* infection are chronically infected and asymptomatic. The majority of individuals are from the endemic regions of Latin America; however, Chagas disease is increasingly recognized in non-endemic areas such as the U.S.[3] Congenital infection is associated with low birth weight, fetal hydrops and neonatal death, but can be asymptomatic[4].

Treatment of Chagas disease is not recommended during pregnancy. Identification and treatment of infected women of child-bearing age prior to becoming pregnant is critical[5].

It is important to inquire about and consider patients' countries of origin and travel histories when developing a differential diagnosis, lest conditions uncommon to one's own region be overlooked.

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Legends:

Fig 1-Placenta B showed marked necrotizing villitis(1a), with numerous villous amastigotes within pseudocysts in necrotic foci(1b)(arrows). Immunohistochemistry for T. cruzi labeled numerous amastigotes within villi(1c).

Disclaimer: The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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