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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

Keywords: Placental diseases, chronic villitis, pregnancy, *T.cruzi*, neonatal death
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. Placental inflammation may be acute, chronic, or granulomatous, and often necrotizing. The organisms may be present in villous trophoblast and Hofbauer cells. 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. Congenital infection is associated with low birth weight, fetal hydrops and neonatal death, but can be asymptomatic.
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.

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.
References:


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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