CICLO CARLOS CHAGAS DE PALESTRAS

12ª EDIÇÃO

100+15: O TEMPO NÃO PARA

Informação, controle, cuidado e eliminação: diferentes estratégias para uma doença com múltiplas dimensões

LIVRO DE RESUMOS

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RESUMO 14

EXAMINING THE IMPACT OF TRANSMISSION MODES ON THE DEVELOPMENT OF DIGESTIVE DISORDERS IN CHAGAS DISEASE

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Despite epidemiological changes in recent decades, Chagas disease (CD) remains a substantial public health issue in Latin America. Digestive alterations in the esophagus and/or colon affect approximately 10-20% of individuals with CD. Few clinical studies have explored factors influencing the emergence of digestive forms of the disease. This study investigates the occurrence of megaviscera within the different CD transmission modes. This is a retrospective descriptive study encompassing patients diagnosed with chronic CD referred to the outpatient center of the INI-Fiocruz between July 1986 and December 2023. Clinical and epidemiological data were extracted from medical records at the beginning of follow-up.The mode of CD transmission was identified by searching the following information in medical records: residence in a rural area endemic for CD, contact with the "kissing bug", maternal history of CD, prior blood transfusion, consumption of açaí in its natural state, or handling/consumption of game meat. The study included 2,186 patients (52.2% women) with an average age of 47.8 years (range: 13-88 years). A majority identified as white (49.8%) and had less than 9 years of education (80.5%). Reported transmission modes were vectorial (90.2%), transfusional (5.7%), vertical (2.9%), oral (0.1%), and unknown (1.1%). Most patients were from Brazil (98.7%), born in areas with high prevalence (52.2%) and morbidity (67.8%) of CD. Those who had migrated from endemic areas for more than 20 years constituted 65.8% of the cohort. CD clinical forms in the cohort were as follows: indeterminate (44.9%), cardiac (43.3%), digestive (5.9%), and cardiodigestive (5.9%). Only a minority (11.8%) presented with digestive or cardiodigestive forms, including 7.5% with megaesophagus, 2.5% with megacolon, and 1.8% with both megaesophagus and megacolon. Regarding the association between forms of CD transmission and clinical manifestations, no statistically significant link (Pearson's Chi-square = 0.726) was observed between transmission modes and the digestive form. This study did not establisha clear link between CD transmission modes and the clinical digestive form.Unlike the observed relationship between vector transmission and Chagas heart disease, recurrent reinfections in patients from endemic areas do not seem to pose a higher risk of developing megaviscera compared to those from non-endemic areas where vertical transmission prevails.

Examining the impact of transmission modes on the development of digestive disorders in Chagas Disease

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Introduction

Despite epidemiological change in recent decades, Chagas disease (CD) remains a substantial public health issue in Latin America. Digestive alterations in the esophagus and/or colon affect approximately 10-20% of individuals with CD. Few clinical studies have explored factors influencing the emergence of digestive forms of the disease. This study investigates the occurrence of megaviscera based on various CD transmission modes

Methodology

This is a retrospective descriptive study encompassing patients diagnosed with chronic CD referred to the outpatient center of the INI-Fiocruz between July 1986 and December 2023. Clinical and epidemiological data were extracted from medical records at the beginning of follow-up.

The mode of CD transmission was identified by searching the following information in medical records:

- Residence in a rural area endemic for CD;
- Contact with the "kissing bug";
- Having a mother with CD;
- History of blood transfusion;
- Consumption of açaí in its natural state;
- Handling/consumption of game meat.

Results

The study included 2,186 patients (52.2% women) with an average age of 47.8 years (range: 13-88 years). A majority identified as white (49.8%) and had less than 9 years of education (80.5%). Reported transmission modes were vectorial (90.2%), transfusional (5.7%), vertical (2.9%), oral (0.1%), and unknown (1.1%). Most patients were from Brazil (98.7%), born in areas with high prevalence (52.2%) and morbidity (67.8%) of CD. Those who had migrated from endemic areas for more than 20 years constituted 65.8% of the cohort.

CD clinical forms in the cohort were as follows: indeterminate (44.9%), cardiac (43.3%), digestive (5.9%), and cardiodigestive (5.9%). Only a minority (11.8%) presented with digestive or cardiodigestive forms, including 7.5% with megaesophagus, 2.5% with megacolon, and 1.8% with both megaesophagus and megacolon.

Regarding the association between forms of CD transmission and clinical manifestations, no statistically significant link (Pearson's Chi-square = 0.726) was observed between transmission modes and the digestive form

Relative risk ratio (95% CI) for the association between transmission mode and presentation of digestive form of CD.

	Megaesophagus (n=191)		Megacolon (n=98)	
	Unadjusted OR (95%CI)	Adjusted* OR (95%CI)	Unadjusted OR (95%CI)	Adjusted* OR (95%CI)
Vectorial	Ref	Ref	Ref	Ref
Congenital	0.33 (0.79 to 1.34) *p-value=0.12*	0.60 (0.14 to 2.51) *p-value=0.48*	1.03 (0.32 to 3.33) *p-value=0.97*	1.74 (0.52 to 5.83) *p-value=0.37*
Other	0.89 (0.46 to 1.73) *p-value=0.73*	1.08 (0.54 to 2.16) *p-value=0.83*	0.70 (0.25 to 1.93) *p-value= 0.49*	0.76 (0.27 to 2.17) *p-value=0.61*

* Model adjusted by age, sex, schooling, and decade of admission at INI/Fiocruz

Conclusion

This study did not suggest a clear link between CD transmission modes and the clinical digestive form. Unlike the suggested relationship between vector transmission and Chagas heart disease, recurrent reinfections in patients from endemic areas do not seem to pose a higher risk of developing megaviscera compared to those from non-endemic areas where vertical transmission prevails.