

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

2024

Submission area: Clinical aspects

RESUMO 9

ANALYSIS OF THE INFLUENCE OF TRANSMISSION MODALITIES ON THE OCCURRENCE OF CHAGAS HEART DISEASE

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Despite epidemiological changes in recent decades, Chagas disease (CD) remains a significant public health concern in Latin America. Approximately 30% of individuals with CD will develop some degree of cardiac impairment, which may progress to severe forms and result in premature death. Studies aimed at identifying factors influencing the progression to the advanced stages of the cardiac form are crucial, as they enhance approaches, resource allocation, and care in the treatment and prevention of complications. However, there are few clinical studies investigating factors influencing the progression to CD cardiac form. This study assessed the occurrence of Chagas heart disease (CHD) according to the modes of CD transmission. 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 form 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 açai in its natural state, or handling/consumption of game meat. A total of 2,186 patients (52.2% women) were included, with an average age of 47.8 years (range, 13-88 years). The majority self-identified as white (49.8%) and had less than 9 years of education (80.5%). The 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, and had migrated from endemic areas more than 20 years ago (65.8%). The prevalence of clinical forms in the cohort was as follows: indeterminate (44.9%), cardiac (43.3%), digestive (5.9%), and cardiodigestive (5.9%). Vectorial transmission was more frequent among those with cardiac form of CD in comparison to those with vertical transmission (vectorial vs vertical, Chi-square test = 0.002). A relationship between vectorial transmission and the occurrence of CHD was observed. Patients from endemic areas, where vector transmission is predominant, are at a higher risk of developing CHD compared to those from non-endemic areas, where vertical transmission is predominant. This greater percentage is likely due to recurrent infections resulting from intense contact with intra-household triatomines.

Analysis of the influence of transmission modalities on the occurrence of Chagas heart disease

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Introduction

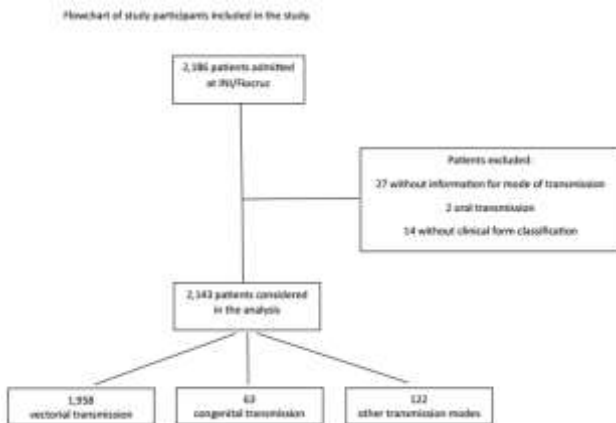
Despite epidemiological changes in recent decades, Chagas disease (CD) remains a significant public health concern in Latin America. Approximately 30% of individuals with CD will develop some degree of cardiac impairment, which may progress to severe forms and result in premature death. Studies aimed at identifying factors influencing the progression to the advanced stages of the cardiac form are crucial, as they enhance approaches, resource allocation, and care in the treatment and prevention of complications. However, there are few clinical studies investigating factors influencing the progression to CD cardiac form. This study assessed the occurrence of Chagas heart disease (CHD) according to the modes of CD transmission.

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 form 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 açai in its natural state, or handling/consumption of game meat.

Results

A total of 2,186 patients (52.2% women) were included, with an average age of 47.8 years (range, 13-88 years). The majority self-identified as white (49.8%) and had less than 9 years of education (80.5%). The reported transmission modes were vectorial (90.2%), transfusional (5.7%), vertical (2.9%), oral (0.1%), and unknow (1.1%). Most patients were from Brazil (98.7%), born in areas with high prevalence (52.2%) and morbidity (67.8%) of CD, and had migrated from endemic areas more than 20 years ago (65.8%). The prevalence of clinical forms in the cohort was as follows: indeterminate (44.9%), cardiac (43.3%), digestive (5.9%), and cardiodigestive (5.9%). Vectorial transmission was more frequent among those with cardiac form of CD in comparison to those with vertical transmission (vectorial vs vertical, Chi-square test = 0.002).



Conclusion

A relationship between vectorial transmission and the occurrence of CHD was observed. Patients from endemic areas, where vector transmission is predominant, are at a higher risk of developing CHD compared to those from non-endemic areas, where vertical transmission is predominant. This greater percentage is likely due to recurrent infections resulting from intense contact with intra-household triatomines.

Tabulação cruzada VT_CONGÊNITA * CARDIO

Contagem		CARDIO		Total
		0	1	
VT_CONGÊNITA	0	937	1143	2080
	1	37	26	63
Total		974	1169	2143

Testes qui-quadrado

	Valor	df	Significância Assintótica (Bilateral)	Sig. exata (2 lados)	Sig. exata (1 lado)
Qui-quadrado de Pearson	9,413 ^a	1	.002		
Correção de continuidade ^b	8,800	1	.003		
Razão de verossimilhança	9,351	1	.002		
Teste Exato de Fisher				.002	.002
Associação Linear por Linear	9,409	1	.002		
Nº de Casos Válidos	2143				

Model unadjusted by age, sex, and schooling.