Hospital admissions and deliveries in pregnant women with Chagas Myocardiopathy.
Berenice, a child in 1909, was the first described case of Chagas disease. She died at age 82 of heart failure in June 1981.

Carlos Chagas side coworker Rocha Lima in the laboratory in Manguinhos

"Meu Pai" Book, page 95.

In endemic áreas, vectorial transmission accounts for over 80% of cases.

- 10 to 12 million people infected
- 21% to 31% will develop heart disease 10 to 30 years after acute event.
- 15,000 annual deaths
- 200,000 new cases per year
Introduction

- Diagnosis:
  - Positive serological tests → ELISA and IFAT

- Clinical Manifestations:
  - Acute fase: mild, non-specific symptoms
  - Cardiac: palpitations, syncope, fatigue, dyspnoea, edema or atypical chest pain.
  - Gastrointestinal: dysphagia with odynophagia, epigastric pain, regurgitation, ptyalism and malnutrition in severe cases of mega-esophagus and prolonged constipation in megacolon
Introduction

- ECG: right bundle branch block, left anterior hemiblock, complex ventricular arrhythmias or sustained ventricular tachycardia, supraventricular tachyarrhythmias, type II second degree and complete A–V blocks, sinus bradycardia.
- Echocardiogram: **left ventricular dysfunction with decreased ejection fraction** and increased LV diastolic diameter, assynchonous movement, **apical aneurysm** or presence of thrombus within a cardiac cavity, with no other justifiable cause.
**Introduction**

- Chagas disease is a major cause of cardiomyopathy and affects patients of reproductive age, especially after 30 years of age.

- The manifestation of Chagas heart disease is variable, and may have conduction disturbances and myocardial failure.

- The evolution of pregnancy depends on the ventricular function.
Objectives

• Evaluate obstetrical and clinical outcome of pregnant women with Chagas disease in a tertiary hospital maternity.

Methods

• Retrospective observational study by charts and medical records analyses.
• From January 2005 to May 31th 2012, there were 31 hospital admissions in 23 pregnant women with Chagas cardiomyopathy at the Obstetrics Department.
Results

- The mean age of the patients was 34,9(±5,7) years.
- Hospital admission prior to delivery (7 to 15 days) was necessary in 23 women because of cardiac deterioration.
- These patients were mostly in the third trimester of pregnancy and admitted around the 36th week.
- The worsening of the functional class was directly related to the ejection fraction and diastolic volume of the left ventricle.
Results

Clinical disorders

- Dilated Cardiomyopathy: 62%
- Pulmonary Hypertension: 31%
- Systolic dysfunction: 43%
- Arrhythmias: 48%
Results

Gestational age at birth:
- > 37 weeks: 87%
- 35 to 37 weeks: 13%
- < 35 weeks: 0%

Birth Weight:
- SGA: 4%
- AGA: 31%
- LGA: 65%
Results

Birthweight

Mean Birthweight

LVEF>50%

3395.55g ± 208.31g

LVEF<50%

2595.7g ± 590g

mean 2933g, SD± 584g
Results

Delivery

- Vaginal delivery: 48%
- Forceps: 26%
- Emergency C-section: 13%
- Elective C-section: 13%

2 functional dystocia
1 cord prolapse after spontaneous amniorrhexis
Conclusion

- Despite the severity of the cases, the patients presented good clinical and perinatal outcome

- Multidisciplinary prenatal care is mandatory to obtain best maternal-fetal results.