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PERICARDITIS DUE TO CHIKUNGUNYA: A CASE REPORT IN WESTERN AMAZONIA

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ABSTRACT

Chikungunya is an arbovirus caused by the alpha Chikungunya virus belonging to the family Togaviridae and the genus Alphavirus. Transmission of the virus occurs through the bite of infected female Aedes aegypti and Aedes albopictus mosquitoes The name derives from a Makonde word meaning "those who bend", describing the posture of people affected by intense joint pain.

Characteristic symptoms include sudden-onset fever and severe polyarthralgia, often accompanied by back pain, rash, headache, and fatigue. The main clinical difference of dengue is severe joint pain, which can be accompanied by edema. After the acute phase, the disease can progress to the subacute (or post-acute) and chronic phases. Chikungunya can be epidemic in character and is associated with significant morbidity due to persistent joint pain. It has a high potential for aggravation as long as it does not have an early diagnosis and treatment.

Keywords: Chikungunya. Virus. Arbovirus. Arthritis. Atypical complications.

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CASE REPORT

A 14-year-old minor patient was admitted to the care of the Infectious Diseases Department due to a typical secondary febrile condition of myalgia and arthralgia, with serological positivity for Chikungunya, admitted in the presence of clinical severity with a spectrum of atypical manifestations: pericarditis, pleuritis and disabling arthritis. Evolving with the need for hospitalization in an Intensive Care Unit bed for acute stabilization (Image 1). In the meantime, clinical treatment for pericarditis was carried out with NSAIDs and Colchicine, with a favorable evolution of the condition. Also as complications, the patient presented worsening from the respiratory point of view, requiring the initiation of empirical antibiotic therapy for pulmonary focus, determined mainly after images suggestive of a consolidative process on chest CT.

The febrile condition associated with polyarticular involvement is typical of Chikungunya Fever, including severe manifestations of the disease that have already been widely discussed in the literature (distal polyarthritis, exacerbation of joint pain in previously affected regions with edema of varying intensity, myopericarditis, pleural involvement, among others), with evidence of evolution to destructive arthropathy similar to psoriatic or rheumatoid arthritis (a condition similar to that presented by the patient, especially in the presence of persistent joint symptoms and limitation of movement).

In the face of a more probable infectious diagnosis (ipsis litteris to arbovirus, mainly due to the lack of diagnostic definition by the Rheumatology team).

OBJECTIVE

A study of the clinical, observational and descriptive data of the medical records was carried out, evidencing atypical alterations such as pericarditis and pleuritis, in order to clarify other clinical manifestations, their complications and treatment.

MATERIALS AND METHODS

An observational and descriptive study was carried out, with clinical data collected from medical records and tests performed in the hospital unit and private laboratory. Consent was obtained and the study was approved by the Ethics Committee.

DISCUSSION

Chikungunya is an arbovirus public health problem transmitted by mosquito bites, rarely by the maternal-fetal route and rarely by blood products. Serious complications and death have been reported during chikungunya outbreaks and occur more frequently among

patients over 65 years of age and patients with chronic underlying problems. Serious complications include respiratory failure, cardiovascular decompensation, myocarditis, acute hepatitis, renal failure, hemorrhage, and neurological involvement, which does not rule out the evolution of the disease in young patients with no previous comorbidities.

It is worth mentioning that the signs of severity of Chikungunya can appear in both the acute and subacute phases of the disease, and it is crucial that health professionals recognize them.

Patients who present atypical manifestations of severity, already mentioned, associated with risk factors, have a greater chance of poor prognosis, which may progress to death.

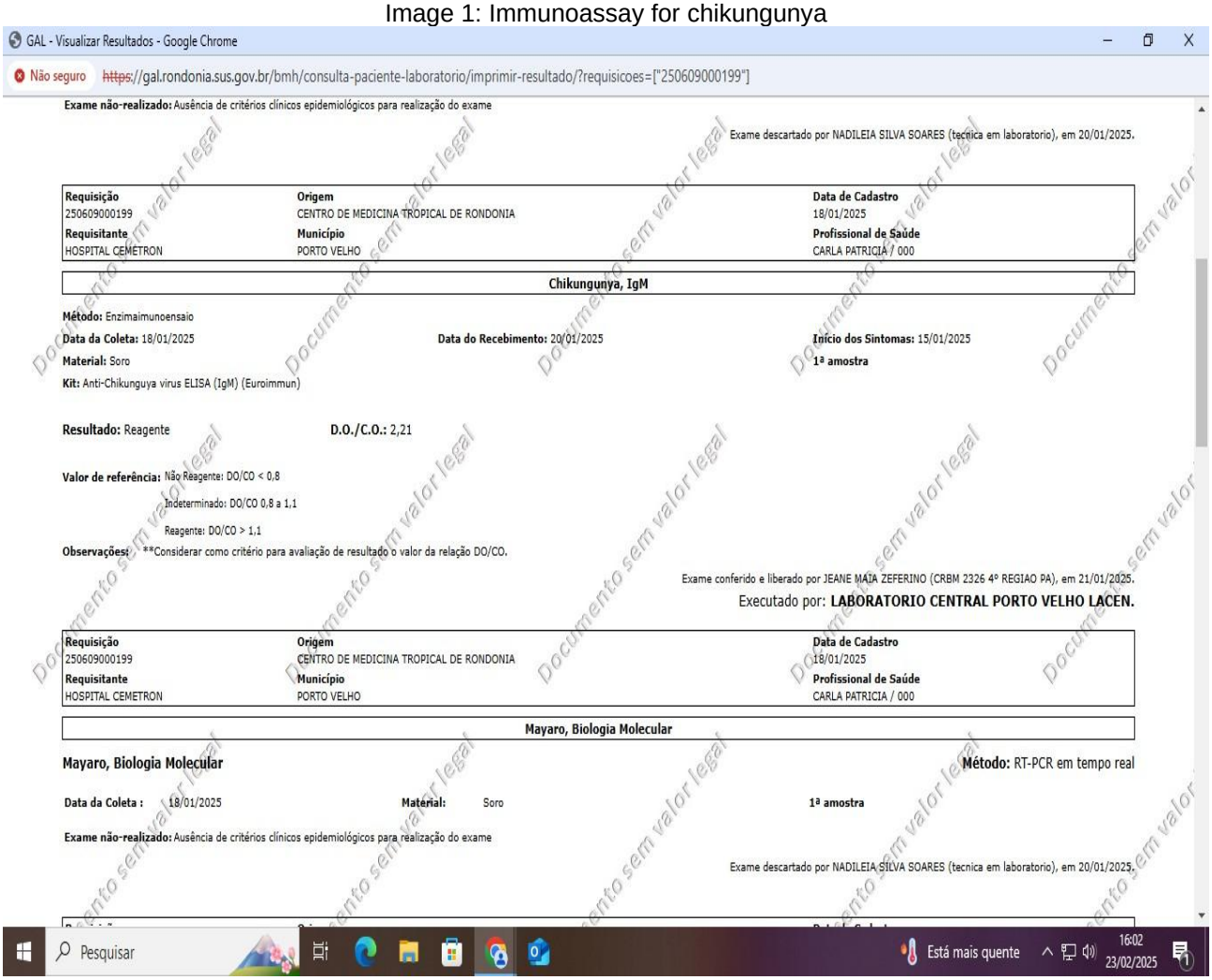
It is important to note that, although the lethality of chikungunya is generally lower than that of dengue in the Americas, in Brazil the number of deaths has been high, possibly due to the number of cases of the disease, which may be underestimated. Many deaths related to the infection are due to decompensation of preexisting comorbidities.

CONCLUSION

The case emphasizes the importance of clinical and epidemiological investigation, as the Chikungunya virus is transmitted by the same vector as Dengue and Zika, which are very common in tropical regions and can be associated with outbreaks.

In this way, the control of mosquito outbreaks by the population, as well as public health measures such as basic sanitation, health care and tracking of these infections should be implemented to control outbreaks, as well as isolated cases, thus promoting health to the population.

Image 1: Immunoassay for chikungunya



GAL - Visualizar Resultados - Google Chrome

Não seguro https://gal.rondonia.sus.gov.br/bmh/consulta-paciente-laboratorio/imprimir-resultado/?requisicoes=["250609000199"]

Exame não-realizado: Ausência de critérios clínicos epidemiológicos para realização do exame

Exame descartado por NADILEIA SILVA SOARES (tecnica em laboratorio), em 20/01/2025.

Requisição	Origem	Data de Cadastro
250609000199	CENTRO DE MEDICINA TROPICAL DE RONDONIA	18/01/2025
Requisitante	**Município**	**Profissional de Saúde**
HOSPITAL CEMETRON	PORTO VELHO	CARLA PATRICIA / 000

Chikungunya, IgM

Método: Enzimaimunoensaio

Data da Coleta: 18/01/2025 **Data do Recebimento:** 20/01/2025 **Início dos Sintomas:** 15/01/2025

Material: Soro **1ª amostra**

Kit: Anti-Chikunguya virus ELISA (IgM) (Euroimmun)

Resultado: Reagente **D.O./C.O.:** 2,21

Valor de referência: Não Reagente: DO/CO < 0,8
Indeterminado: DO/CO 0,8 a 1,1
Reagente: DO/CO > 1,1

Observações: **Considerar como critério para avaliação de resultado o valor da relação DO/CO.

Exame conferido e liberado por JEANE MAIA ZEFERINO (CRBM 2326 4° REGIAO PA), em 21/01/2025.

Executado por: **LABORATORIO CENTRAL PORTO VELHO LACEN.**

Requisição	Origem	Data de Cadastro
250609000199	CENTRO DE MEDICINA TROPICAL DE RONDONIA	18/01/2025
Requisitante	**Município**	**Profissional de Saúde**
HOSPITAL CEMETRON	PORTO VELHO	CARLA PATRICIA / 000

Mayaro, Biologia Molecular

Mayaro, Biologia Molecular **Método:** RT-PCR em tempo real

Data da Coleta : 18/01/2025 **Matérial:** Soro **1ª amostra**

Exame não-realizado: Ausência de critérios clínicos epidemiológicos para realização do exame

Exame descartado por NADILEIA SILVA SOARES (tecnica em laboratorio), em 20/01/2025.

Pesquisar Está mais quente 16:02 23/02/2025

Image 2: Infra-diffuse ST supra in AVR with spodick signal:

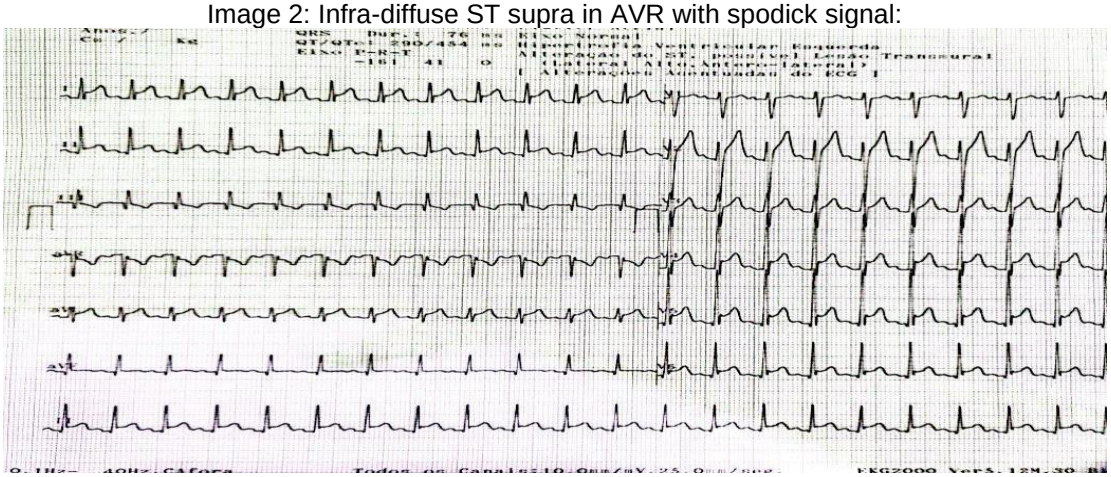
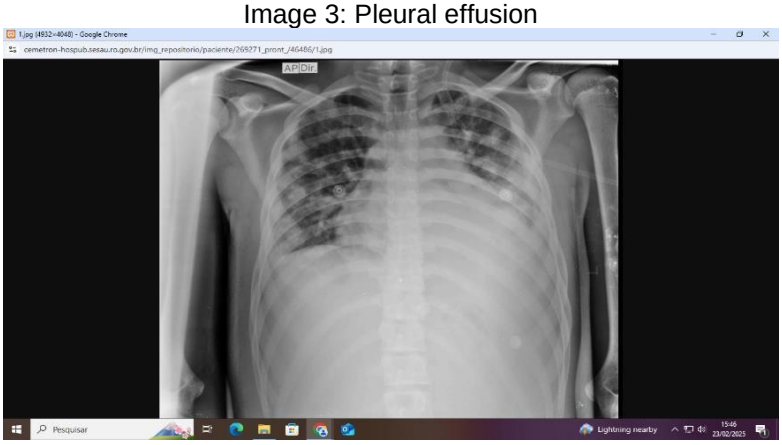


Image 3: Pleural effusion



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