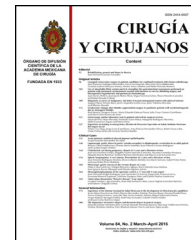




# CIRUGÍA y CIRUJANOS

Órgano de difusión científica de la Academia Mexicana de Cirugía  
Fundada en 1933

[www.amc.org.mx](http://www.amc.org.mx) [www.elsevier.es/circir](http://www.elsevier.es/circir)



## CLINICAL CASE

# Hydatidosis simulating a cardiac tumour with pulmonary metastases<sup>☆</sup>



Marta Martín-Izquierdo<sup>a</sup>, Alejandro Martín-Trenor<sup>b,\*</sup>

<sup>a</sup> Servicio de Pediatría y Puericultura, Clínica San Miguel, Iguatorio Médico Quirúrgico de Navarra, Pamplona, Spain

<sup>b</sup> Departamento de Cardiología y Cirugía Cardíaca, Sección de Cirugía Cardíaca, Clínica Universidad de Navarra, Pamplona, Spain

Received 24 November 2014; accepted 8 April 2015

Available online 3 July 2016

### KEYWORDS

Cardiac tumour;  
Multiple pulmonary  
nodules;  
Cardiac  
echinococcosis;  
Pulmonary  
echinococcosis;  
Cardiac surgery;  
Pulmonary surgery

### Abstract

**Background:** The presence of multiple symptomatic pulmonary nodules and one cardiac tumour in a child requires urgent diagnosis and treatment. Until a few decades ago, the diagnosis of a cardiac tumour was difficult and was based on a high index of suspicion from indirect signs, and required angiocardiography for confirmation. Echocardiography and other imaging techniques have also helped in the detection of cardiac neoplasms. However, it is not always easy to make the correct diagnosis.

**Clinical case:** The case is presented of a 12-year-old boy with pulmonary symptoms, and diagnosed with a cardiac tumour with lung metastases. The presence of numerous pulmonary nodules was confirmed in our hospital. The echocardiogram detected a solid cardiac nodule in the right ventricle. Magnetic resonance imaging confirmed the findings and the diagnosis. Puncture-aspiration of a lung nodule gave the diagnosis of hydatidosis. He underwent open-heart surgery with cardiac cyst resection and treated with anthelmintics. The lung cysts were then excised, and he recovered uneventfully.

**Discussion:** This child had multiple pulmonary nodules and a solid cardiac nodule, and was suspected of having a cardiac tumour with pulmonary metastases. However, given the clinical history, background and morphology of pulmonary nodules, another possible aetiology for consideration is echinococcosis. The clinical picture of cardiac hydatidosis and its complications is highly variable. The clinical history is essential in these cases, as well as having a high index of suspicion.

<sup>☆</sup> Please cite this article as: Martín-Izquierdo M, Martín-Trenor A. Hidatidosis simulando un tumor cardíaco con metástasis pulmonares. Cir Cir. 2016;84:318–323.

\* Corresponding author at: Departamento de Cardiología y Cirugía Cardíaca, Sección de Cirugía Cardíaca, Clínica Universidad de Navarra, Avda. Pío XII, No. 36, 31008 Pamplona, Spain. Tel.: +34 9482 96385.

E-mail address: [amtrenor@gmail.com](mailto:amtrenor@gmail.com) (A. Martín-Trenor).

**Conclusion:** Hydatidosis should be included in the differential diagnosis of a solid, echogenic, cardiac nodule. The treatment for cardiopulmonary hydatid cysts is surgical, followed by anthelmintics.

© 2015 Academia Mexicana de Cirugía A.C. Published by Masson Doyma México S.A. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## PALABRAS CLAVE

Tumor cardíaco;  
Nódulos pulmonares  
múltiples;  
Hidatidosis cardíaca;  
Hidatidosis pulmonar;  
Cirugía cardíaca;  
Cirugía pulmonar

## Hidatidosis simulando un tumor cardíaco con metástasis pulmonares

### Resumen

**Antecedentes:** La presencia de múltiples nódulos pulmonares sintomáticos y uno cardíaco en un niño exigen un diagnóstico y tratamiento urgentes. El diagnóstico de una neoformación cardíaca era difícil hasta hace pocas décadas, y se basaba en un alto índice de sospecha ante signos indirectos, necesitando la angiocardiógrafa para su confirmación. La ecocardiografía y otros medios de imagen han facilitado la detección de los nódulos cardíacos. Sin embargo, no siempre es fácil acertar con el diagnóstico.

**Caso clínico:** Niño de 12 años con síntomas pulmonares. Diagnosticado de tumor cardíaco con metástasis pulmonares. En nuestro hospital se confirmó la presencia de numerosos nódulos pulmonares. El ecocardiograma detectó un nódulo cardíaco sólido ventricular derecho. La resonancia magnética nuclear confirmó los hallazgos, haciéndose el mismo diagnóstico. La punción-aspiración de un nódulo pulmonar fue diagnóstica: hidatidosis. Fue operado a corazón abierto resecaando el quiste cardíaco y tratado con antihelmínticos. Posteriormente se extirparon los quistes pulmonares. Se recuperó el paciente sin complicaciones.

**Discusión:** En este niño, con múltiples nódulos pulmonares y uno cardíaco sólido, se hizo el diagnóstico de tumor cardíaco con metástasis pulmonares; sin embargo, con la historia clínica, los antecedentes y la morfología de los nódulos pulmonares se debió incluir la equinocosis como posible etiología. El cuadro clínico de los quistes hidatídicos cardíacos y de sus complicaciones es muy variable. En estos casos es fundamental la historia clínica y tener un alto índice de sospecha.

**Conclusión:** En el diagnóstico diferencial de un nódulo cardíaco sólido, ecodenso, debe incluirse la hidatidosis. El tratamiento de los quistes hidatídicos cardiopulmonares es la cirugía.

© 2015 Academia Mexicana de Cirugía A.C. Publicado por Masson Doyma México S.A. Este es un artículo Open Access bajo la licencia CC BY-NC-ND (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## Background

*Premortem* diagnosis of a cardiac neoformation was very difficult up until a few decades ago.<sup>1,2</sup> The two-dimensional echocardiograph has made it possible to detect these tumours.<sup>1</sup> Nuclear magnetic resonance (NMR) enables better definition of their morphology and location. However, with these imaging tests it is not always easy to reach a correct diagnosis.

Neoplasms are the most frequent cause of the appearance of simultaneous nodules in the heart and lung. Primary cardiac tumours in children are rare and only from 8% to 10% are malignant.<sup>3,4</sup> Myxoma is rare in children<sup>1,4</sup> and is the only benign tumour to produce embolisms, its location in the right ventricle embolising the lungs is very rare.<sup>5-7</sup> Malignant primary cardiac neoplasms, which can develop in the right ventricle and cause pulmonary metastases, include rhabdomyosarcoma and angiosarcoma, which are rare in childhood.<sup>3,8,9</sup> Malignant cardiac tumours secondary to metastases of cancers in other sites are 20–40% more common than primary cardiac tumours.<sup>3,9</sup>

Hydatid cysts can implant in the heart<sup>2,10,11</sup> and give solid images on ultrasound, simulating tumours.<sup>12-15</sup> Cysts located in the right ventricle can cause embolism and pulmonary dissemination.<sup>13</sup>

The objective of this article was to present the case of a child found to have multiple pulmonary nodules and one solid echodense cardiac nodule, and to review the errors committed in the initial diagnosis and the surgical treatment once the aetiology of the lesions had been confirmed.

## Clinical case

A 12-year-old Romanian boy, who had been resident in Spain for a year and a half, attended the Emergency Department presenting with: a productive cough, occasionally with bloody sputum, and pain in the left hemithorax (attributed to a fall from a tree); in the days prior to the consultation he had presented a fever. Physical examination was normal, apart from a temperature of 39.5°C. The laboratory tests showed moderate leukocytosis, blood cultures were

Download English Version:

<https://daneshyari.com/en/article/4283319>

Download Persian Version:

<https://daneshyari.com/article/4283319>

[Daneshyari.com](https://daneshyari.com)