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CASE REPORT

Evanescent tumor, a real diagnostic challenge: in relation to a case

Tumor evanescente, un verdadero reto diagnóstico: a propósito de un caso

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ABSTRACT

Introduction: phantom tumor or evanescent tumor refers to an interlobar pleural effusion that occurs in patients with decompensated heart failure and resembles a lung tumor or mass that disappears after appropriate treatment. Its frequency is unknown.
Objective: this entity was described based on a case report, emphasizing the proper use of the clinical method.
Case report: the case of a 74-year-old male patient with a past medical history of hypertension and ischemic heart disease is presented. He presented with paroxysmal nocturnal dyspnea, orthopnea, pinpoint pain in the side extending to the right costal margin, fever of 38°C, crackles toward the lung bases, painful hepatomegaly, and edema in both lower limbs. The diagnosis of this presentation, the evanescent tumor or phantom tumor, is achieved through correct use of the clinical method supported by serial chest radiographs and is confirmed by the resolution of the effusion after initiating diuretic treatment.
Conclusions: the relevance of this case lies in describing the difficulty of diagnosis, despite the potential complications of a late diagnosis, and demonstrating the need for accurate and effective application of the method.

Keywords: Paroxysmal dyspnea; Pleural effusion; Heart failure; X-Ray.

RESUMEN

Introducción: se denomina tumor fantasma o tumor evanescente, al derrame pleural, interlobar, que se presenta en pacientes con insuficiencia cardíaca descompensada que semeja un tumor o masa pulmonar que desaparece tras tratamiento oportuno. Se desconoce su frecuencia de aparición.
Objetivo: se propuso describir esta entidad, a propósito de un caso presentado; poniendo énfasis en el buen uso del método clínico.
Reporte de caso: se expone el caso de paciente masculino, de 74 años de edad, con antecedentes patológicos personales de Hipertensión arterial y Cardiopatía isquémica; que presentó disnea paroxística nocturna, ortopnea, dolor en punta de costado que se extendía hasta el reborde costal derecho, fiebre de 38°C, crepitantes hacia las bases pulmonares, hepatomegalia dolorosa y edema en ambos miembros inferiores. El diagnóstico de esta presentación, el tumor evanescente o tumor fantasma se logra mediante un correcto empleo del método clínico apoyado en radiografías de tórax seriadas y se confirma con la resolución del derrame tras instaurar un tratamiento diurético.

Conclusiones: la relevancia de este caso radica en describir la dificultad del diagnóstico, pese a las posibles complicaciones de un diagnóstico tardío y quedó demostrado la necesidad de aplicar de manera certera y eficaz el método.

Palabras clave: Disnea Paroxística; Derrame Pleural; Insuficiencia Cardíaca; Radiografía.

INTRODUCTION

Heart failure (HF) is a syndrome resulting from any structural or functional impairment of ventricular filling or cardiac output. The picture is florid, but the typical clinical manifestations are summarized as dyspnea and fatigue, and may progress to pulmonary and splanchnic congestion, with peripheral edema. HF statistics reflect a presentation between 1-2 % of the adult population in developed countries, and increases to more than 10 % among people 70 years of age or older. The risk found for HF with emphasis at 55 years of age is 33 % for males and 28 % for females.[1] It should be highlighted that mortality due to (HF) in Cuba was increased from a total of 1904 patients in 2018 to 2059 in 2019, which was equivalent to rates of 16,9 and 18,3 per 100 000 inhabitants, respectively.[1,2]

In decompensated heart failure, interlobar pleural effusion appears, it simulates a pulmonary mass that disappears as an instantaneous result of the application of timely medical treatment and this is exactly what is called pulmonary phantom tumor.[3,4] It occurs predominantly in men, the right hemithorax is the most affected, and cases are moderately reported with origin in the right transverse fissure, less frequently in the oblique fissure. Simultaneous involvement of both fissures has been reported in up to one fifth of the cases, being sporadic the involvement of the left hemithorax.[1,2,3]

This entity was described in 1928 by Stewart, who called it "lobar hydrothorax" after performing an autopsy to confirm clinical suspicion.[5] Its frequency of occurrence is unknown and so far it is still uncommon. Its importance lies in the need to make a differential diagnosis with pulmonary masses or nodules of other etiology.

That is why the aim of this manuscript is to expose the phantom tumor or evanescent tumor as an atypical presentation of heart failure, as a starting point for the presentation of this case.

CASE REPORT

Male patient 74 years old, white skin, urban origin, with personal pathological history of arterial hypertension and ischemic heart disease, for which he maintains treatment with Enalapril (20 mg tablet) 20 mg in single oral dose, Spironolactone (25 mg tablet) 25 mg once a day and Digoxin (0,25 mg tablet) 0,25 mg once a day.

She went to the on-call department of the Manuel Gonzales Diaz Polyclinic with Hospitalization Services, Bahia Honda, Artemisa, for having presented paroxysmal nocturnal dyspnea, which improved at rest, exacerbated with small efforts and orthopnea. In addition, a stabbing, lacerating, paroxysmal pain, at the tip of the side that extended to the right costal ridge and improved with changes in position without disappearing completely. Also fever of 38 C° that occurred at any time and was easily relieved with the administration of antipyretics such as dipyrone 600 mg intramuscular.

Physical examination revealed the presence of crepitant rales with predominance towards the pulmonary bases. Painful hepatomegaly, exceeding about 2 cm the right costal ridge, accompanied by hepatojugular reflux. Edema in both lower limbs, normothermic, hard, shiny, smooth, tense, slightly painful and difficult to detect.

Complementary laboratory tests were indicated; which were exposed below together with their normal reference values, provided by the Laboratory Service of the Polyclinic: hematocrit 0,46 (0,40-0,50), Hemoglobin 14 g/dl (12-16 g/dl), Glycemia 6mmol/L (4,2-6,1 mmol/L), Uric Acid 225mmol/L (208-428 mmol/L), Urea 6,7 mmol/L (1,7-8,1 mmol/L), Creatinine 96 mmol/L (40-128 mmol/L), Total Proteins 67 g/L (60-80 g/L). It should be understood that all values were in the normal range.

An electrocardiogram was also performed, showing isolated grade I ventricular extrasystoles, according to the classification of Lown and Wolf (monomorphic extrasystoles less than 30 seconds), but without ST segment alterations, as shown in figure 1.

A simple postero anterior chest X-ray was performed, showing cardiomegaly, peripheral right pleural thickening, mass-like image in the right lower middle third and interstitial opacity in the bases, as shown in figure 2.

Treatment with furosemide 20 mg intravenously every 8 hours for 72 hours was indicated, there was considerable clinical and radiological improvement, then at a rate of 40 mg orally every 12 hours until completing 10 days to repeat radiographic image and rearrange treatments in follow-up consultations.

In the anteroposterior view of the chest X-ray, taken on the third day of admission, there was a partial resolution of pleural thickening and disappearance of the apparent opacity in the lower third of the right lung, although cardiomegaly persisted, as shown in figure 3.

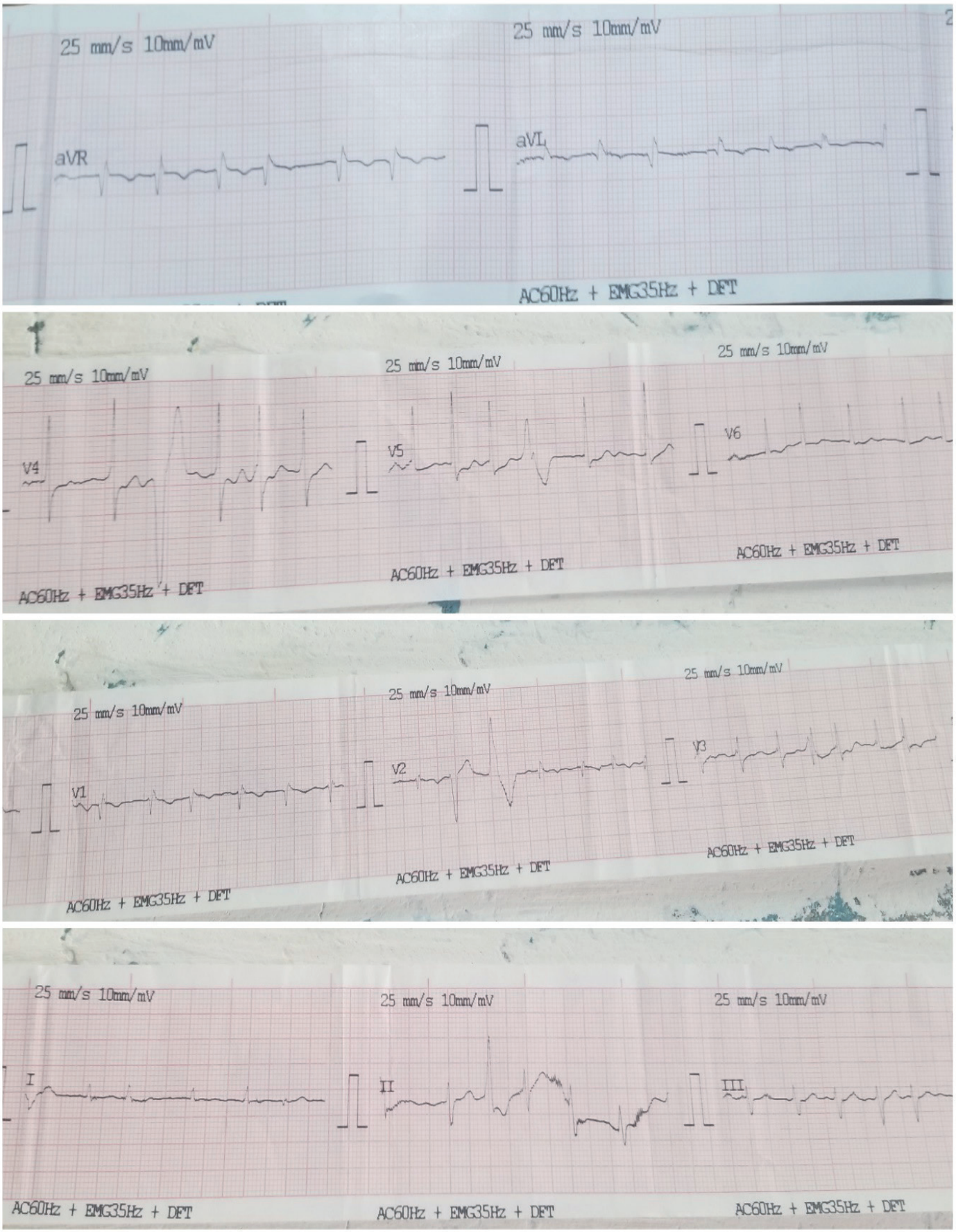

Figure1 . Extracted from the patient's medical history: electrocardiogram showing monomorphic extrasystoles less than 30 seconds

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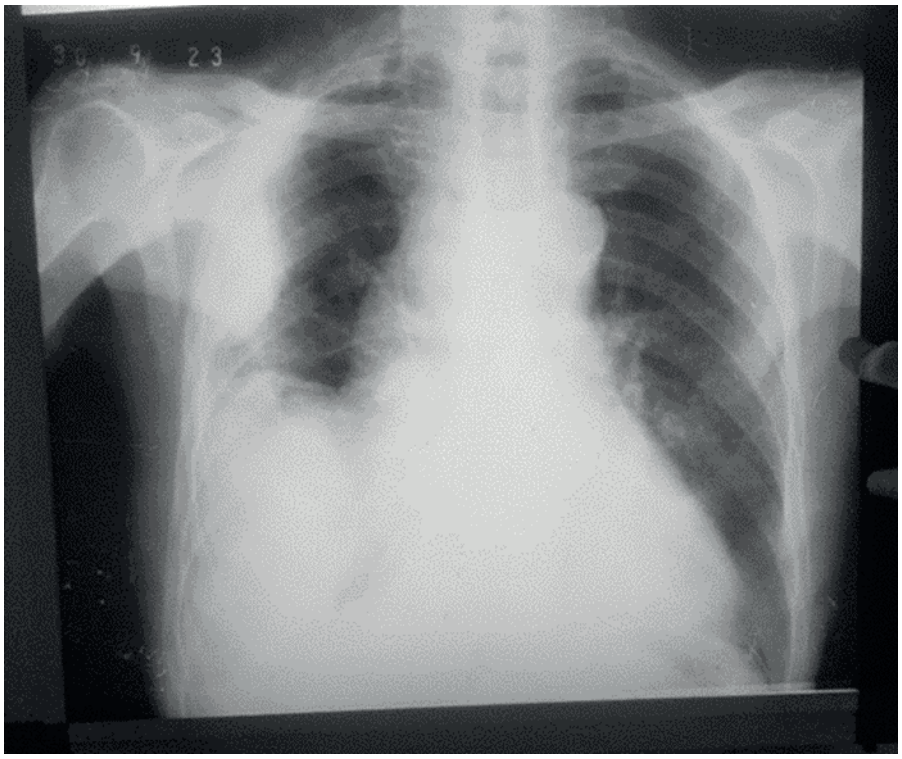

Figure2 . Extracted from the patient's medical history

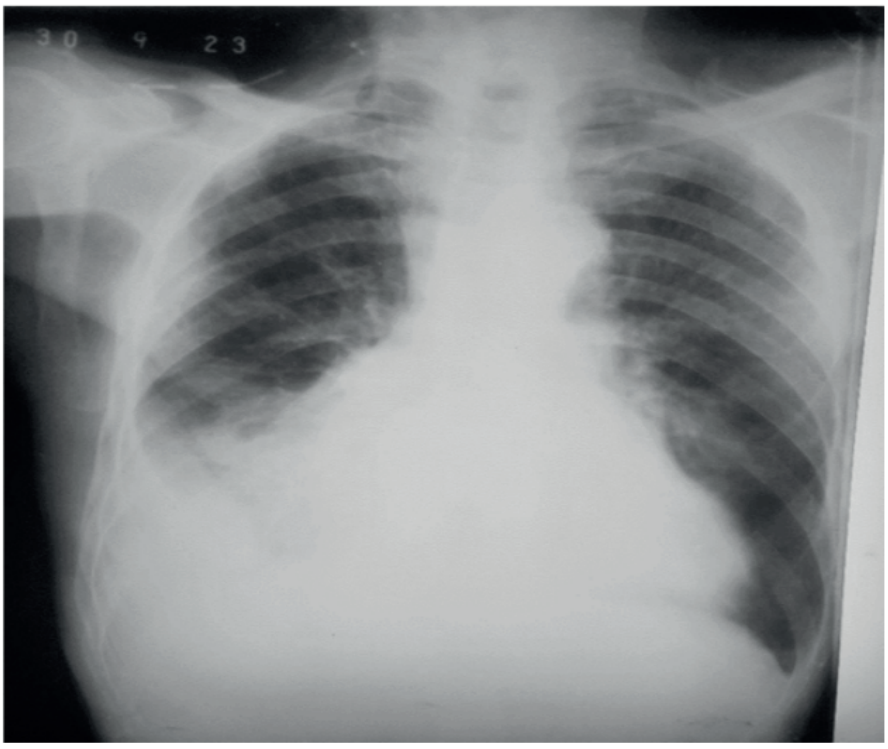

Figure3 . Extracted from the patient's medical history

DISCUSSION

Phantom or evanescent tumor (TF) is characterized by the presence of localized interlobal pleural effusion, which appears in patients with decompensated heart failure, and can also occur in cases of renal failure and hypoalbuminemia; or sometimes it can simulate a tumor mass that disappears with medical treatment.[6,7]

Even today, the real cause of its strange presentation is not clear, is associated to anatomical predispositions such as; congenital defects of the pleura or the presence of adhesions due to previous pleural processes eriores.[8] A key role to understand its pathogenesis is related to adhesions and obliteration of the pleural space around

the edge of the fissure due to pleuritis; it conditions the ideal place to serve as a reservoir in decompensations of HF.

Under these conditions, TFs are obtained at the exact moment when transudation from the pulmonary vascular space exceeds the resorption capacity of the pleural lymphatics. However, this atypical intercisural distribution of pleural effusions can also be explained by local increase of the elastic recoil of adjacent lung, partially atelectasis, which produces a so-called ''suction cup'' effect favoring fluid accumulation, even in the absence of pleural adhesions.

The higher the hydrostatic pressure on the left side, the greater the venous and lymphatic drainage, which justifies the predilection for the right side.[9]

The lateral radiography of the thorax can orient the diagnosis because it allows the localization of the lesion, however, the clinical method and the logical-scientific thinking are the essential elements. The clinical history, as well as the epidemiological antecedents, are of help in the diagnosis.[10]

During the hospital stay, the comparison with serial thoracic radiographies is useful to evaluate differential diagnoses in order to rule out possible tumor processes. The clinical signs and symptoms of heart failure are the guiding clinical element. However, it must be taken into account that in pulmonary carcinomas dyspnea is described in about 60 % of the patients, with progressive onset as a characteristic.[10]

The interpretation of cardiomegaly or fluid in the costophrenic angles in the images is suggestive of the diagnosis, although they can also occur without them. The presence of a mass in the pulmonary parenchyma requires a differential diagnosis between pneumonia and tumor. It is very relevant the correct interpretation of the complementary tests; by the physician in the process, because it must be taken into account that the presence of leukocytosis in the hemogram, which would orient towards an infectious process; is present in lung cancer and together with the leukoerythroblastic reaction.[10,11,12,13]

Round pneumonia is another disease to be considered in the differential diagnosis of a phantom tumor. It predominates in childhood and is a rare process in adults. It is most often located in the lower lobes and a history of fever and cough suggests an infectious cause; however, these symptoms may be absent or temporally inconsistent with the radiological picture.[12,14] Although the clinical picture suggests cardiac failure based on the patient's clinical presentation, pulmonary infarction should be included as a differential diagnosis, since it is a complication that appears in 10 to 15 % of cases of pulmonary thromboembolism and is secondary to the obstruction of segmental or subsegmental arteries.[15] It is frequently associated with people with underlying cardiovascular or neoplastic disease.

The importance of this case presentation lies in highlighting how unusual heart failure with this presentation can be and how it can go unnoticed. It is essential to know this presentation because taking into account the incidence of heart failure in Cuba as an entity according to a study conducted in Cuba in the Cardiology Department of the Saturnino Lora Teaching Clinical and Surgical Provincial Hospital of Santiago de Cuba, from September 2018 to the same month of 2020, it was shown that the disease is more frequent after 60 years of age. The presentation was higher in women, in the intermediate age and arterial hypertension predominates as a risk factor.[3,16]

The degree of complexity of accurate diagnosis of TF arises from the need for an adequate approach, in order to optimize time, eliminate unnecessary processes and treatments. The World Health Organization (WHO) warns about polypharmacy and Antimicrobial Resistance (AMR) as the silent epidemic of the XXI century, it is a fact that if this entity is not treated correctly, it can end up being treated as pneumonia or any other etiology, putting the patient's life at greater risk. Likewise, it is highlighted how rare this entity is and how its diagnosis can be issued from the support of low-cost studies, which, being interpreted in the most appropriate way possible, will define the entity. The complexity in the diagnosis of this condition underlies the few cases reported, hence the interest for further study.

CONCLUSIONS

The clinical symptoms and signs of heart failure may constitute the primary clinical elements to make a scientific approach that objectively propitiates the accurate diagnosis of this entity, always ruling out tumor masses, pneumonia and pulmonary infarction. It is confirmed by means of serial chest X-rays, in which the resolution of the effusion is demonstrated after establishing diuretic treatment; effectively avoiding polypharmacy, over-medication or imprudent and unnecessary antibiotic therapy, at a time of great need. All of the above, once again demonstrates the importance of applying the clinical method in an accurate and effective manner.

BIBLIOGRAPHICAL REFERENCES

1. Chávez Alfonso Christian Osmar, Centurión Osmar Antonio. Conceptos epidemiológicos, manejo diagnóstico y farmacológico de la insuficiencia cardiaca congestiva crónica. Rev. virtual Soc. Parag. Med. Int. [Internet]. 2019 Mar [cited 2024 June 08]; 6(1): 75-85. Available from: http://scielo.iics.una.py/scielo.php?script=sci_

arttext&pid=S2312-38932019000100075&lng=en.

2. Maldonado JC. Epidemiología de la insuficiencia cardíaca. Rev Med Vozandes 2018; 29: 51 – 53. [Internet]. [citado 7 enero 2025] Disponible en: https://revistamedicavozandes.com/wp-content/uploads/2019/12/EDIT.pdf

3. Turro-Mesa L, del-Río-Caballero G, Turro-Caró E, del-Río-Mesa G, Mesa-Valiente R. Características clínicas y epidemiológicas en pacientes hospitalizados por insuficiencia cardiaca. MEDISAN [Internet]. 2023 [citado 8 Jun 2024]; 27 (3) Disponible en: https://medisan.sld.cu/index.php/san/article/view/4106

4. Labrador-Descalzo S, Zulueta Moreno A. Tumor evanescente en un varón anciano fumador [A case of vanishing tumor in a smoker elderly male]. Aten Primaria. 2022 Oct;54(10):102457. Spanish. doi: 10.1016/j.aprim.2022.102457.

5. Dávila-Hernández C, Ñahuis Palomino C, Peralta-Obregón P, Bendezú-Ramos G, J Cárdenas-Trejo, Picoy-Romero D. Tumor fantasma del pulmón. Rev Soc Peru Med Interna. 2020;33(4): 161-163. https://doi.org/10.36393/spmi.v33i4.564

6. Colectivo de Autores. "Clasificación de las extrasístoles ventriculares según Lown y Wolf." Medicina Interna al Día, Blog docente sobre Medicina Interna. [Internet]. 24 oct. 2012. [Cited 2025 enero 31] Available from: https://medicinainternaaldia.wordpress.com/2012/10/24/clasificacion-de-las-extrasistoles-ventriculares-segun-lown-y-wolf/

7. Forero-Saldarriaga Santiago. Claves diagnósticas en el paciente adulto con derrame pleural: revisión narrativa. Iatreia [Internet]. 2020 Dec [cited 2024 June 07] ; 33(4):348-359.Availablefrom: http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0121-07932020000400348&lng=en.

8. Ocampo José M., Urrea-Zapata Juan K., Gutiérrez-Londoño Harold, Jurado-Delgado Janeth, Uribe-Valencia Mauricio A.. Tumor evanescente: un reto diagnóstico. Rev. Colomb. Cardiol. [Internet]. 2018 Apr [cited 2024 June 07]; 25(2): 153-153. Available from: http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0120-56332018000200153&lng=en.

9. Casanova ME, Reyes-Ortiz CA, León Giraldo H, Castano˜ Cifuentes O. Características clínicas y supervivencia a 30 días de pacientes ancianos colombianos hospitalizados por insuficiencia cardíaca descompensada. Rev Esp Geriatr Gerontol. 2015; 50:153---5, http://dx.doi.org/10.1016/j.regg.2014.11.013.

10. González Rodríguez Raidel, Cardentey García Juan. La historia clínica médica como documento médico legal. Rev.Med.Electrón. [Internet]. 2015 Dic [citado 2024 Jun 07] ; 37(6): 648-653. Disponible en: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1684-18242015000600011&lng=es.

11. Fanta CH, Kacoyanis GP, Koster JK Jr, McFadden ER Jr. Pseudopseudotumor of the lung. Hepatic herniation into the right major fissure imitating a pseudotumor on chest roentgenogram. Chest. 1980; 78:346---8.

12. Labrador-Bernal R, Valido-Valdes D, Campo-Díaz MC. Valor de la leucograma en el proceso diagnóstico del paciente pediátrico. Rev Ciencias Médicas. 2022; 26(6): e5532. Disponible en: http://revcmpinar.sld.cu/index.php/publicaciones/article/view/5532

13. Rodríguez Claudio, Vargas Bryan C., Rojas Esteban, Velásquez Carolina, de la Maza Verónica, Mancilla Edgardo. Lesiones cavitadas pulmonares: diagnóstico diferencial y revisión pictográfica. Rev. chil. radiol. [Internet]. 2023 Jun [citado 2024 Jun 07] ; 29(2): 57-67. Disponible en: http://www.scielo.cl/scielo.php?script=sci_arttext&pid=S0717-93082023000200057&lng=es.

14. Cemeli Cano Mercedes, Laliena Aznar Sara, Valiente Lozano José, Martínez Ganuza Berta, Bustillo Alonso Matilde, García Vera César. Características clínicas y evolutivas de la neumonía adquirida en la comunidad en pacientes hospitalarios. Rev Pediatr Aten Primaria [Internet]. 2020 Mar [citado 2024 Jun 08] ; 22(85): 23-32. Disponible en: http://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S1139-76322020000100005&lng=es.

15. Arias-Rodríguez Fabián D., Armijos-Quintero Daniel A., Beltrán-Vinueza Pamela A., Córdova-Macías Daniela V., Guadamud-Loor Jorge X., Osejos-Moreira Walter D. et al . Diagnóstico y tratamiento de tromboembolia

pulmonar. Revisión bibliográfica. Rev. mex. angiol. [revista en la Internet]. 2022 Sep [citado 2024 Jun 08]; 50(3): 96-109. Disponible en: http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S2696-130X2022000300096&lng=es.

16. Jain S, Self WH, Wunderink RG, Fakhran S, Balk R, Bramley AM, et al., For the CDC EPIC Study Team. Community-acquired pneumonia requiring hospitalization among U.S. adults. N Engl J Med. 2015; 373:415---27, http://dx.doi.org/10.1056/NEJMoa1500245.

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