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Universidad de Oviedo

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EDITORIAL

DE LA VOCACIÓN AL RETIRO SILENCIOSO: "QUIET QUITTING" EN EL CONTEXTO DE LA PATOLOGÍA MÉDICA

FROM VOCATION TO QUIET RESIGNATION: QUIET QUITTING IN THE CONTEXT OF MEDICAL PATHOLOGY

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EDITORIAL

En el campo de la patología médica, una especialidad que exige precisión diagnóstica y colaboración interdisciplinaria, el fenómeno conocido como ""quiet quitting"" o renuncia silenciosa plantea un reto significativo. Este concepto, que ha ganado notoriedad tras la pandemia de COVID-19, describe una actitud laboral donde los profesionales cumplen estrictamente con las responsabilidades descritas en su contrato, evitando cualquier esfuerzo adicional o contribución extracurricular. En el contexto de la patología, esta tendencia podría comprometer la calidad del diagnóstico y, por ende, la seguridad del paciente.

El "quiet quitting" no surge de manera repentina. Es el resultado de un desgaste progresivo, a menudo desencadenado por factores como la falta de reconocimiento, líderes ineficaces o un entorno laboral poco saludable. En los laboratorios de patología, estas condiciones pueden amplificarse debido a la alta carga de trabajo y las demandas inherentes a la especialidad. Entre los síntomas más comunes se encuentran la disminución en la participación activa, el retraimiento de las discusiones clínicas y una reducción en la comunicación con el equipo. Estos signos, aunque sutiles, tienen el potencial de afectar tanto el rendimiento individual como el colectivo.

El fenómeno del "quiet quitting" se ha asociado también con cambios culturales derivados del trabajo remoto y la reorganización laboral durante la pandemia. Estudios recientes sugieren que muchos profesionales han reevaluado sus prioridades, priorizando su bienestar personal sobre el esfuerzo no remunerado. En patología, donde el éxito depende de un equilibrio entre el compromiso individual y la colaboración en equipo, esta desvinculación puede tener un impacto desproporcionado.

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Para los líderes en patología, reconocer y abordar este fenómeno es esencial. Entre las medidas que se pueden implementar destacan:

1. **Promoción de oportunidades de desarrollo profesional:** Ofrecer capacitaciones y programas de mentoría para fortalecer el compromiso y el sentido de pertenencia.
2. **Fomento de un entorno laboral positivo:** Crear un ambiente que valore la retroalimentación constructiva y que reconozca los logros individuales y colectivos.
3. **Equilibrio entre vida laboral y personal:** Diseñar políticas que reduzcan el agotamiento, como distribución equitativa de cargas de trabajo y horarios flexibles.
4. **Reconocimiento adecuado:** Establecer sistemas que recompensen el esfuerzo adicional y promuevan el avance profesional dentro de la organización.

El "quiet quitting" no debe interpretarse como una falta de compromiso inherente, sino como una respuesta a condiciones laborales insostenibles. Ignorar estas señales podría no solo erosionar la moral del equipo, sino también poner en riesgo la calidad del servicio y la seguridad del paciente. Los laboratorios de patología, como centros neurálgicos en el cuidado de la salud, tienen la responsabilidad de liderar con ejemplo, promoviendo una cultura que valore y respalde a sus profesionales.

En conclusión, el "quiet quitting" en patología representa un desafío complejo, pero abordable con estrategias bien definidas. La inversión en el bienestar y desarrollo de los patólogos no solo fortalece el compromiso, sino que asegura la continuidad de una atención médica de alta calidad. En un ámbito donde cada diagnóstico puede cambiar una vida, mantener a los profesionales motivados y valorados es, sin duda, una prioridad ineludible.

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ATYPICAL EPIDIDYMO-ORCHITIS WITH SCROTAL MANIFESTATION OF *ENTAMOEBA HISTOLYTICA* WITH CONCURRENT *MORGANELLA MORGANII* INFECTION.

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ABSTRACT

Epididymo-orchitis is a common cause of acute scrotal pain, typically resulting from bacterial infections, with approximately 600,000 cases diagnosed annually in the United States. While most cases are attributed to sexually transmitted pathogens such as *Neisseria gonorrhoeae* or *Chlamydia trachomatis* in younger men and gram-negative organisms like *Escherichia coli* in older patients, rare parasitic infections can complicate the clinical picture. We present the case of an 82-year-old male with a complex medical history, including severe coronary artery disease, hypertension, and a recent Transcatheter Aortic Valve Implantation (TAVI), who developed left-sided scrotal pain and swelling. Initially diagnosed with orchiepididymitis and treated with antibiotics, his condition deteriorated, leading to recurrent febrile episodes and worsening symptoms. Imaging revealed a multiseptated scrotal collection and ischemic testicular changes. Surgical exploration uncovered purulent material, which cultured *Morganella morganii*, and histopathological analysis surprisingly revealed *Entamoeba histolytica* morphology with phagocytosed erythrocytes, an exceedingly rare finding in extraintestinal amebiasis. Stool and serological tests for *E. histolytica* were negative, suggesting isolated scrotal involvement. The patient underwent left orchiectomy, received broad-spectrum antibiotics followed by targeted therapy, and recovered without recurrence over a five-month follow-up.

This case emphasizes the importance of considering rare parasitic infections in atypical or refractory presentations of epididymal-orchitis, particularly in regions where *E. histolytica* is endemic or in patients with unique clinical histories. The unusual scrotal involvement of *E. histolytica*, with only one other documented case, highlights the diagnostic challenges and emphasizes the role of a multidisciplinary approach combining surgical intervention, microbiological studies, and tailored antimicrobial therapy. This report expands the understanding of extraintestinal amebiasis and reinforces the need for vigilance in identifying rare etiologies in urological conditions.

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Keywords: Epididymo-orchitis, *Entamoeba histolytica*, scrotal infection, extraintestinal amebiasis, *Morganella morganii*.

INTRODUCTION

Amoebiasis, an infection caused by the protozoan parasite *Entamoeba histolytica*, remains a significant public health concern, particularly in regions with inadequate sanitation and limited access to clean water. The transmission of this pathogen primarily occurs via the fecal-oral route, where individuals ingest cysts through contaminated food or water. Additionally, transmission can occur indirectly through contact with contaminated hands or objects or via anal-oral contact [1].

Epidemiological data indicate that amoebiasis is prevalent worldwide, with higher incidence rates in tropical and subtropical regions. This distribution correlates strongly with socioeconomic factors, as the disease is closely associated with poor sanitation and hygiene practices. Notably, the majority of infections (approximately 90%) are asymptomatic. However, in cases of invasive amoebiasis, *E. histolytica* trophozoites penetrate the intestinal mucosa, leading to clinical manifestations such as amoebic colitis or amoebic dysentery. Symptoms of invasive disease include diarrhea, which may be watery or bloody, abdominal cramps, pain, and fever. In severe instances, trophozoites can cause ulcerations in the intestinal wall, facilitating hematogenous spread to extraintestinal sites, most commonly the liver, resulting in amoebic liver abscesses [2].

Extraintestinal amoebiasis is an uncommon manifestation of infection with *Entamoeba histolytica*, occurring when trophozoites disseminate beyond the intestinal lumen. Among these rare presentations, hepatic involvement is the predominant extraintestinal manifestation, with amoebic liver abscesses being the most frequently reported condition. Other forms, such as pulmonary, cerebral, or genitourinary amoebiasis, are exceedingly rare. Scrotal involvement, in particular, is extraordinarily uncommon, with only a single documented case in the medical literature to date. This extreme rarity underscores the uniqueness of such cases and their clinical significance [3].

The pathophysiology of scrotal amoebiasis likely involves the hematogenous spread or direct extension from a contiguous abscess, though its precise mechanism remains speculative due to its rarity. Management of these atypical cases typically includes a combination of surgical drainage to address localized abscesses and the administration of antiparasitic drugs, such as metronidazole, to eradicate systemic infection. Despite the rarity, early recognition and prompt treatment are critical to prevent complications and ensure favorable outcomes [3].

Recent advancements in diagnostic tools, such as ultrasound, computed tomography (CT), and molecular techniques like polymerase chain reaction (PCR), have significantly improved our ability to identify atypical presentations of *Entamoeba histolytica*. These technologies enable the precise differentiation of *E. histolytica* from non-pathogenic species, such as *E. Dispar*, and support more accurate diagnosis and targeted treatment strategies. Despite these innovations, the rarity of such cases highlights the ongoing need for further research to deepen our understanding of the epidemiology and pathogenesis of amoebiasis. This is particularly crucial in resource-limited settings, where

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amoebiasis remains a major cause of morbidity and mortality. Continued research will be vital for refining diagnostic methods, developing more effective therapies, and implementing comprehensive public health strategies to reduce transmission and disease burden globally [4].

CLINICAL CASE

An 82-year-old male with a complex medical history, including hypertension, dyslipidemia, acute pericarditis, lower urinary tract symptoms, unstable angina, severe single-vessel coronary artery disease treated with a drug-eluting stent, cholecystectomy, inguinal herniorrhaphy, and phakectomy, presented with recurrent scrotal pathology.

Initial Presentation:
In February 2022, the patient reported acute left testicular pain and swelling. Evaluation at Mérida Hospital, Spain, led to a diagnosis of left orchiepididymitis. Ultrasound findings suggested a millimetric abscess in the epididymis. He was discharged with oral antibiotic therapy and referred for outpatient urology follow-up.

Hospitalization and Recurrence:
In March 2022, he was hospitalized for transcatheter aortic valve implantation (TAVI). During his hospitalization, he developed a febrile episode of unknown origin, with negative blood cultures. Two weeks post-discharge, he presented with chills, progressive left scrotal pain, and swelling. Laboratory evaluation revealed leukocytosis with neutrophilia and altered coagulation parameters. Urine cultures were negative. Scrotal ultrasound demonstrated an unstructured left testis with absent Doppler flow and a multiseptated scrotal collection (Figures 1 & 2). Abdominal-pelvic computed tomography (CT) confirmed a scrotal abscess with thickened walls and no extension to the pelvis (Figures 3 & 4).

Surgical Intervention:
A left scrototomy revealed an ischemic testis encased in a pseudo capsule with significant purulent content. Culture of the purulent material isolated Morganella morganii. Given the ischemia, an orchiectomy was performed. Postoperatively, the patient received broad-spectrum antibiotics (meropenem) followed by tailored therapy based on culture sensitivity. He was discharged in stable condition 48 hours postoperatively.

Pathology and Follow-Up:
Histopathological examination identified microorganisms with morphology consistent with Entamoeba histolytica, characterized by phagocytosed erythrocytes. No evidence of neoplastic pathology was noted. Serial stool studies and serological testing for E. histolytica were negative. Over a 5-month follow-up period, the patient demonstrated complete clinical resolution without recurrence or new foci of infection, rendering subsequent antiparasitic treatment unnecessary.

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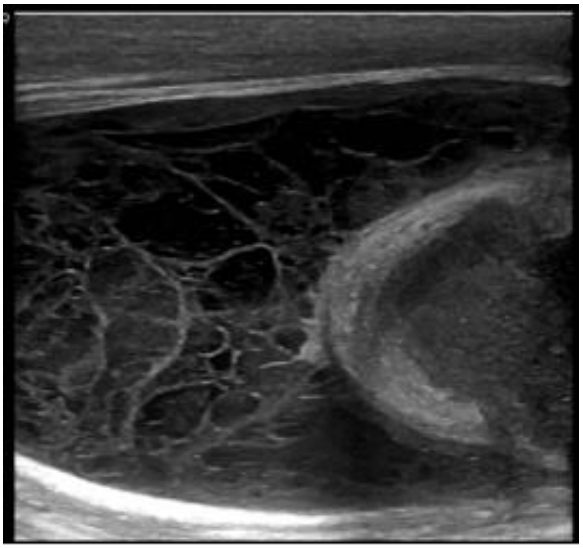

Figure 1. Scrotal ultrasound with evidence of multiseptated left scrotal collection.

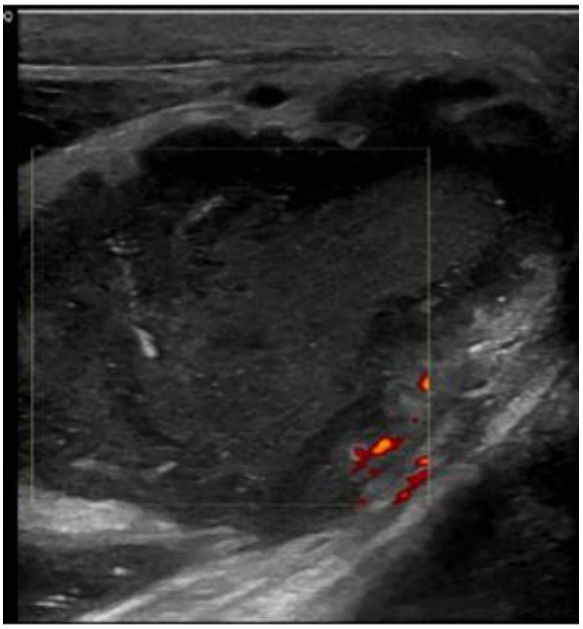

Figure 2. Left testicle Doppler without evidence of intratesticular vascular flow.

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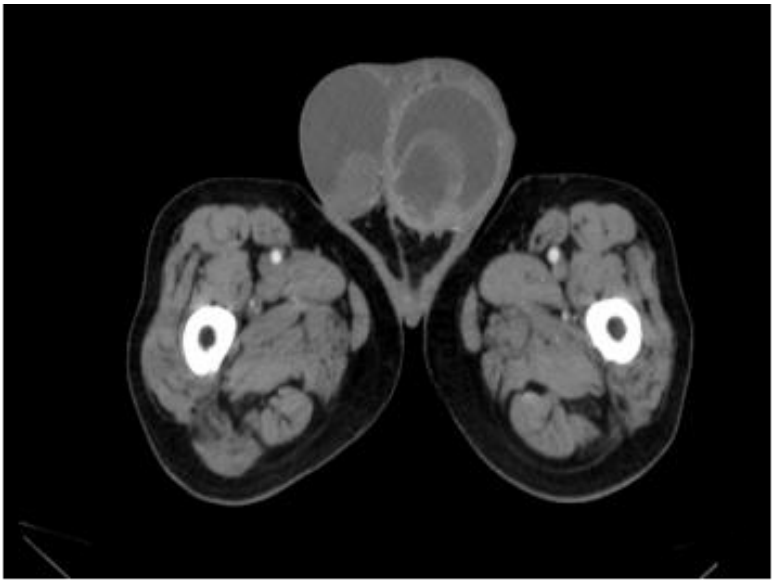

Figure 3. Pelvic CT with evidence of left scrotal abscess and unstructured ipsilateral testis.

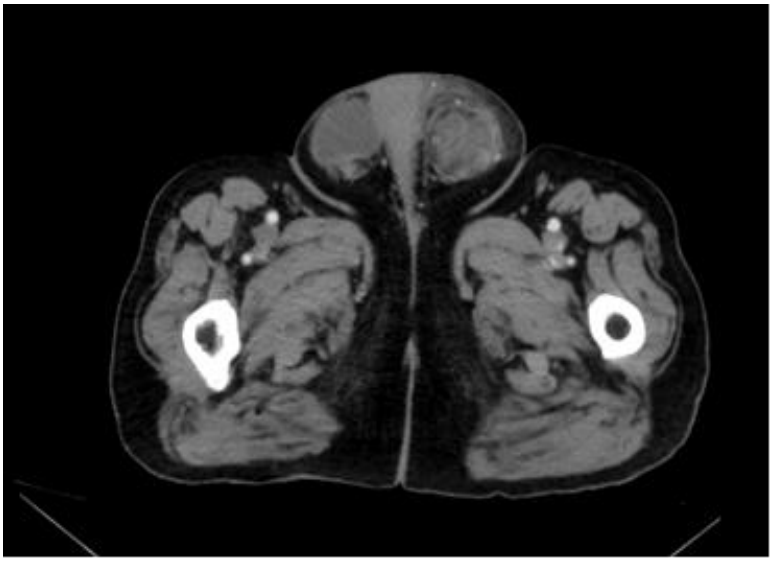

Figure 4. Pelvic CT with evidence of left scrotal abscess and unstructured ipsilateral testis.

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DISCUSSION

Epididymal-orchitis is one of the most common causes of acute scrotal pain in adult men, with approximately 600,000 cases diagnosed annually in the United States. It is a condition primarily driven by the retrograde ascent of pathogens to the epididymis, often progressing to involve the testis. While bacterial infections represent the overwhelming majority of cases, this report highlights the importance of considering rarer etiologies, such as parasitic infections, particularly in patients with atypical presentations or refractory symptoms [5].

The condition typically follows a bimodal age distribution, with *Neisseria gonorrhoeae* and *Chlamydia trachomatis* being the predominant causative agents in men aged 14–35 years. In contrast, older men are more frequently affected by infections caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, and various *Staphylococcus* and *Streptococcus* species. In some cases, the infection may progress to severe complications, such as abscess formation, testicular infarction, or systemic sepsis, emphasizing the need for timely diagnosis and intervention[6].

This case stands out due to the unexpected involvement of *Entamoeba histolytica*, a protozoan parasite typically associated with intestinal infections and, in rare instances, extraintestinal manifestations such as hepatic abscesses. Scrotal involvement is exceedingly rare, with only one previous case described in the literature, making this presentation unique and significant. The detection of *E. histolytica* in histopathological examination, alongside the absence of stool or serological evidence of infection, underscores the complexity of this parasitic disease's diagnosis and pathophysiology.

Clinically, the patient presented with progressive scrotal pain and swelling, initially managed as bacterial orchiepididymitis. Despite standard antibiotic therapy, the condition escalated, leading to testicular ischemia and necessitating surgical intervention. The isolation of *Morganella morganii* from purulent material and subsequent histopathological identification of *E. histolytica* morphology revealed a dual infectious process that could have been overlooked without comprehensive diagnostic measures.

This case raises critical considerations about the management of epididymal-orchitis. While bacterial pathogens dominate, parasitic infections, though rare, should not be discounted, particularly in endemic regions or in patients with travel histories. Early imaging, thorough microbiological analysis, and a high index of suspicion for uncommon pathogens are essential to guide appropriate treatment.

The postoperative recovery in this patient was remarkable, with a swift resolution of systemic inflammatory markers and localized symptoms. He demonstrated full recovery at follow-up without recurrence, obviating the need for antiparasitic therapy. This outcome reflects the efficacy of timely surgical intervention and targeted antimicrobial therapy in managing such complex cases.

This case emphasizes the importance of considering rare parasitic infections like *E. histolytica* in patients with atypical presentations of epididymal-orchitis. It also highlights the value of a multidisciplinary approach involving urology, infectious disease specialists, and pathologists to ensure accurate diagnosis and effective management. By broadening our differential diagnosis in such scenarios, we can enhance patient outcomes and expand our understanding of the diverse etiologies underlying epididymal-orchitis.

CONCLUSION

In conclusion, this case presents a rare and striking example of how the clinical landscape of epididymal-orchitis can be complicated by unexpected and unusual pathogens, highlighting the essential need for clinicians to remain open to considering even the rarest of infections. While epididymal-orchitis is most commonly associated with bacterial pathogens, particularly *Escherichia coli* and sexually transmitted bacteria, the involvement of *Entamoeba histolytica* in a scrotal infection is both rare and extraordinary. This is only the second documented instance of such a finding, further underscoring the enigmatic nature of extraintestinal amebiasis and the challenges it poses to clinical diagnosis.

In this case, a combination of timely surgical intervention, meticulous microbiological workup, and insightful histopathological analysis led to the identification of dual infections: the first, a bacterial infection caused by *Morganella morganii*, and the second, a parasitic infection that could have easily been overlooked without the comprehensive approach taken. The patient's clinical course—marked by his complex medical history and the persistence of symptoms despite standard therapy—demonstrates how rare infections can complicate seemingly straightforward diagnoses, requiring a keen eye and a multifaceted approach.

This case is evidence of the power of collaboration across specialties, where urologists, infectious disease specialists, and pathologists joined forces to unravel the unusual pathology at play. The absence of stool and serological evidence of *E. histolytica* elsewhere in the body only adds to the perplexity, suggesting an isolated scrotal manifestation that challenges the current understanding of its pathophysiology. As global research continues to uncover new layers of complexity in parasitic infections, this case serves as a powerful reminder of how much there is still to learn about the ways in which pathogens can present themselves.

Ultimately, the patient's remarkable recovery with no recurrence over five months—and without the need for further antiparasitic treatment—highlights the profound impact of precise and early intervention. It is a rare success story in the face of a truly unique clinical challenge, offering new perspectives on the diagnosis and management of extraintestinal amebiasis in urological settings.

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IMAGES

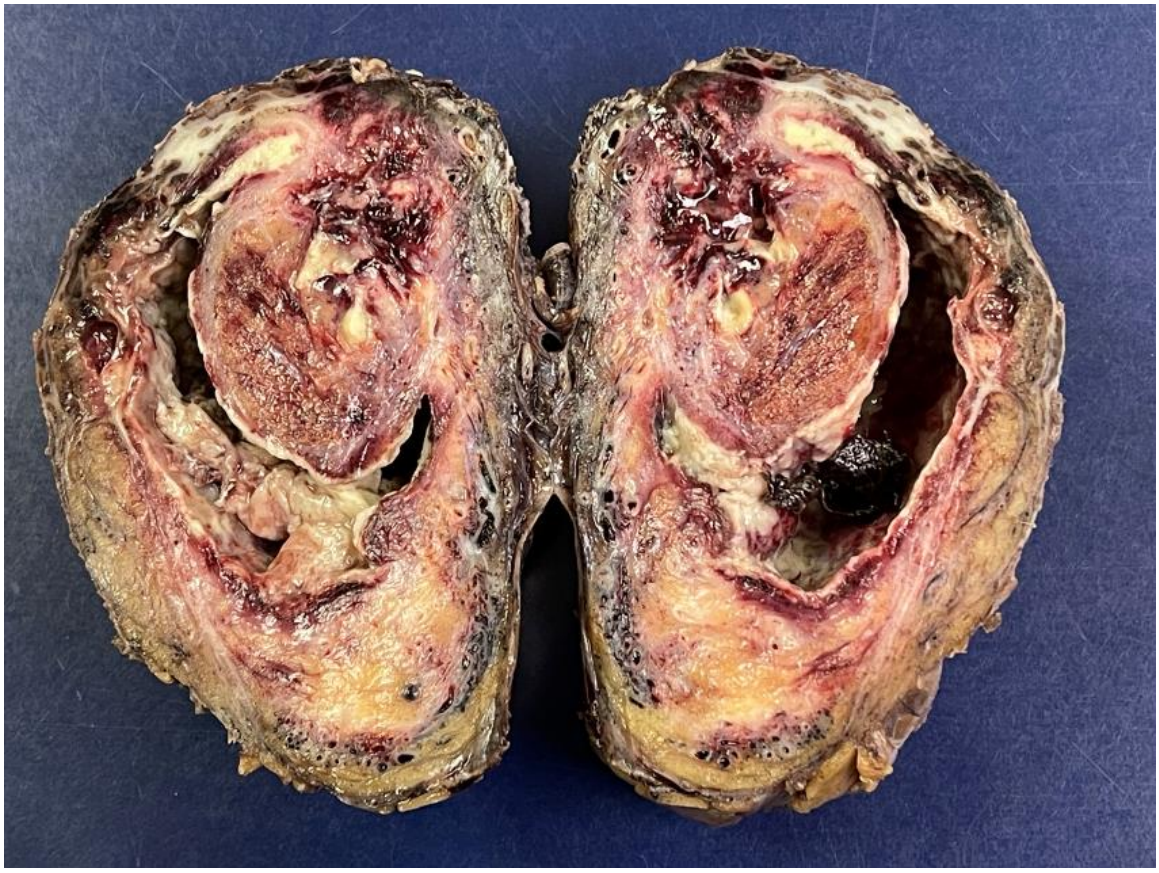

Image 1. Macroscopic appearance of the testis, characterized by significant distortion of the parenchyma and tunics due to necrosis, hemorrhage, and the formation of cavitary abscesses.

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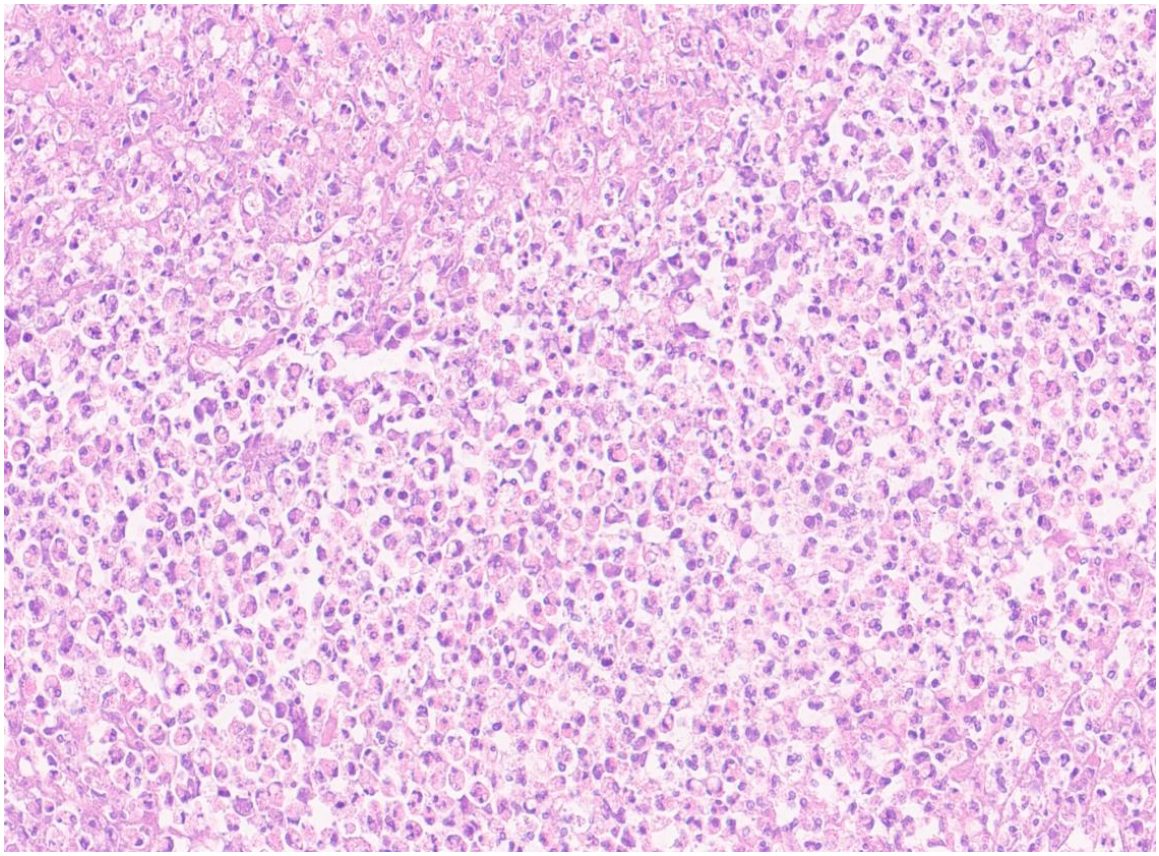

Image 2. Extensive inflammatory reaction with abundant neutrophils and necrosis.

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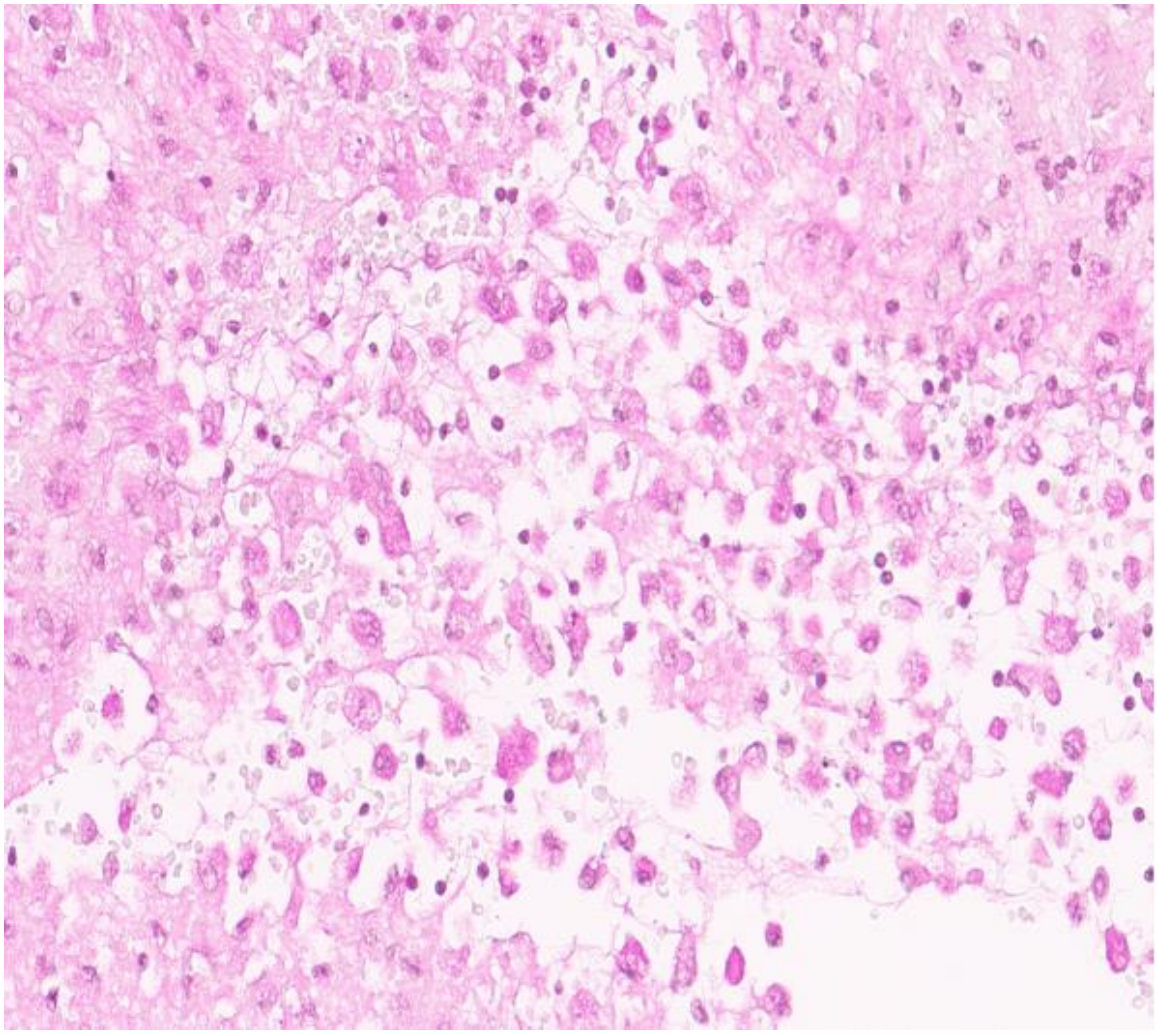

Image 3. Some amoebas are identified amidst the necrosis and inflammation.

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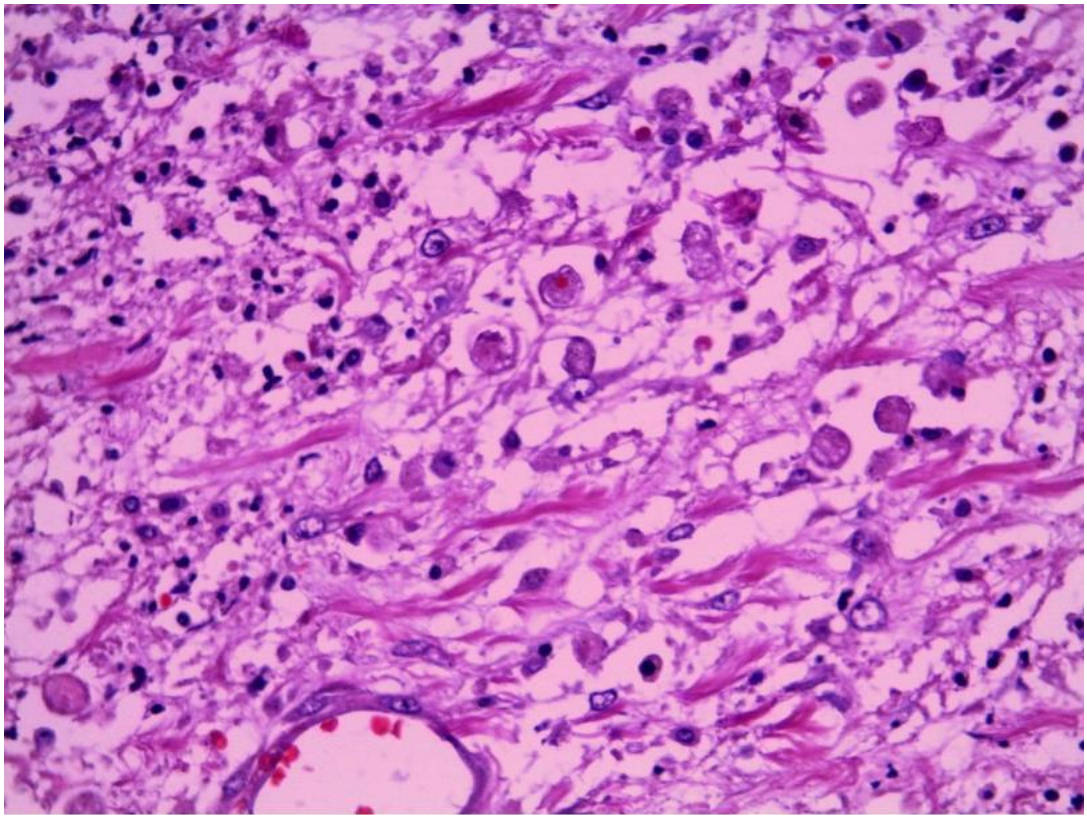

Image4. Numerous amoebas with phagocytized erythrocytes are identified.

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RESOURCES

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GOOD SYNDROME PRESENTING WITH PROGRESSIVE MUSCLE WEAKNESS FOLLOWING THYMECTOMY.

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ABSTRACT

We present the case of a patient with Good syndrome who developed progressive muscle weakness following thymectomy. Muscle biopsy revealed criteria consistent with inclusion body myositis. Throughout her illness, she developed pure red cell aplasia, respiratory failure, and recurrent respiratory infections. She was treated with intravenous immunoglobulins, pyridostigmine, and cyclosporine A, achieving stability in her hematologic condition but without improvement in her myopathic symptoms. This case highlights the potential role of the thymus in the pathogenesis of autoimmune manifestations.

Keywords: Good syndrome, thymoma, inclusion body myopathy, pure red cell aplasia.
Palabras clave: Síndrome de Good, timoma, miopatía por cuerpos de inclusión, aplasia pura de células rojas

Abbreviations:
GS: Good Syndrome
IVIG: intravenous immunoglobulins
ICM: inclusion body myositis
MG: myasthenia gravis
PCRA: pure red cell aplasia

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INTRODUCTION

Good Syndrome (GS) is characterized by the association of primary immunodeficiency, absence of B cells, hypogammaglobulinemia, defects in cell-mediated immunity, and CD4 lymphocytopenia in the presence of a thymoma (1). We present the clinical case of a patient with GS who developed multiple autoimmune complications.

CASE PRESENTATION

A 73-year-old woman presented with recurrent respiratory infections. Laboratory studies revealed decreased levels of immunoglobulin G (3.09 g/L), B lymphocytes (9 cells/µL), Natural Killer lymphocytes (45 cells/µL), and switched memory lymphocytes (2% of B lymphocytes). Radiological imaging identified a mediastinal mass, and after thymectomy, a stage I Masaoka and WHO type B2 thymoma was confirmed, establishing the diagnosis of Good Syndrome (GS). Treatment with intravenous immunoglobulin (IVIG) was initiated at a single dose of 15 grams every 28 days.

Ten months later, she was readmitted for superinfected bronchiectasis with isolates of S. pneumoniae, P. jirovecii, and CMV, requiring invasive mechanical ventilation. This was complicated by progressive, non-painful muscle weakness that had begun after thymectomy.

Upon clinical improvement, examination revealed cephalic anteflexion due to cervical extensor muscle weakness, proximal weakness in the upper limbs with preserved distal strength, and associated weakness in knee extension comparable to that in hip flexion. Laboratory tests indicated normocytic, normochromic anemia (hemoglobin 8.5 g/dL). Tests for creatine kinase, anti-acetylcholine receptor, anti-MuSK, anti-NT5C1A, and anti-myositis antibodies were all within normal ranges or negative.

Electroneuromyography revealed subacute inflammatory myopathy with a proximal predominance. Pathologic analysis of the quadriceps showed findings consistent with inclusion body myositis (IBM). Bone marrow biopsy displayed normal cellularity in the myeloid and megakaryocyte series but no erythroid series representation.

Therapy with pyridostigmine, cyclosporine A, and IVIG at 20 g every 28 days was initiated, resulting in hematologic stability but no improvement in muscle weakness. Despite these treatments, the patient died five years after diagnosis due to intestinal obstruction, and no autopsy was performed.

DISCUSSION

The thymus plays a key role in the development of the adaptive immune system, particularly in T lymphocyte maturation, which may explain the occurrence of autoimmune complications and paraneoplastic syndromes (2). Autoimmune conditions associated with thymoma include myasthenia gravis (MG), pure red cell aplasia (PRCA), and immunodeficiency. Autoimmune manifestations have been described in 3.8% of a series of 807 patients with thymoma (3).

Only a small percentage (6–10%) of patients with thymoma develop Good Syndrome (GS). Typically, thymoma is diagnosed before GS. No specific histopathologic subtype of thymoma has been predominantly associated with this immunodeficiency (4). The immune dysregulation present in GS establishes a link between thymoma and the characteristic manifestations of immunodeficiency, with the generation of specific antibodies potentially playing a pathogenic role in the development of

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autoimmune manifestations and hematologic abnormalities (4,5).
Acquired PRCA is associated with thymoma and other neoplasms and may also be seen in autoimmune diseases such as systemic lupus erythematosus and GS. The association of thymoma, MG, and inflammatory myopathy (IM) is reported in up to 5% of patients (6). We identified only two cases of IM, specifically dermatomyositis and polymyositis, in patients with GS (7,8). No references were found in the literature linking thymoma, GS, and inclusion body myositis (IBM). IBM as paraneoplastic syndrome is rare, with hematologic malignancies being the most frequent association. The pathogenesis of IBM appears to have both autoimmune and degenerative origins. We propose that the immune dysregulation induced by thymoma is responsible for the development of IBM in this context (9,10).

CONCLUSION

Immune dysregulation in GS establishes a link between thymoma and immunodeficiency manifestations, with unusual associations including GS, IBM, and PRCA.

ETHICAL CONSIDERATIONS:

The images and clinical data published have the signed written consent of the deceased patient's daughter. The authors are in possession of this written consent. They declare that this article does not contain any personal information that could be used to identify the patient.

CONFLICT OF INTEREST:

The authors declare that they have no conflict of interest in the conduct of this work.

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IMAGES:

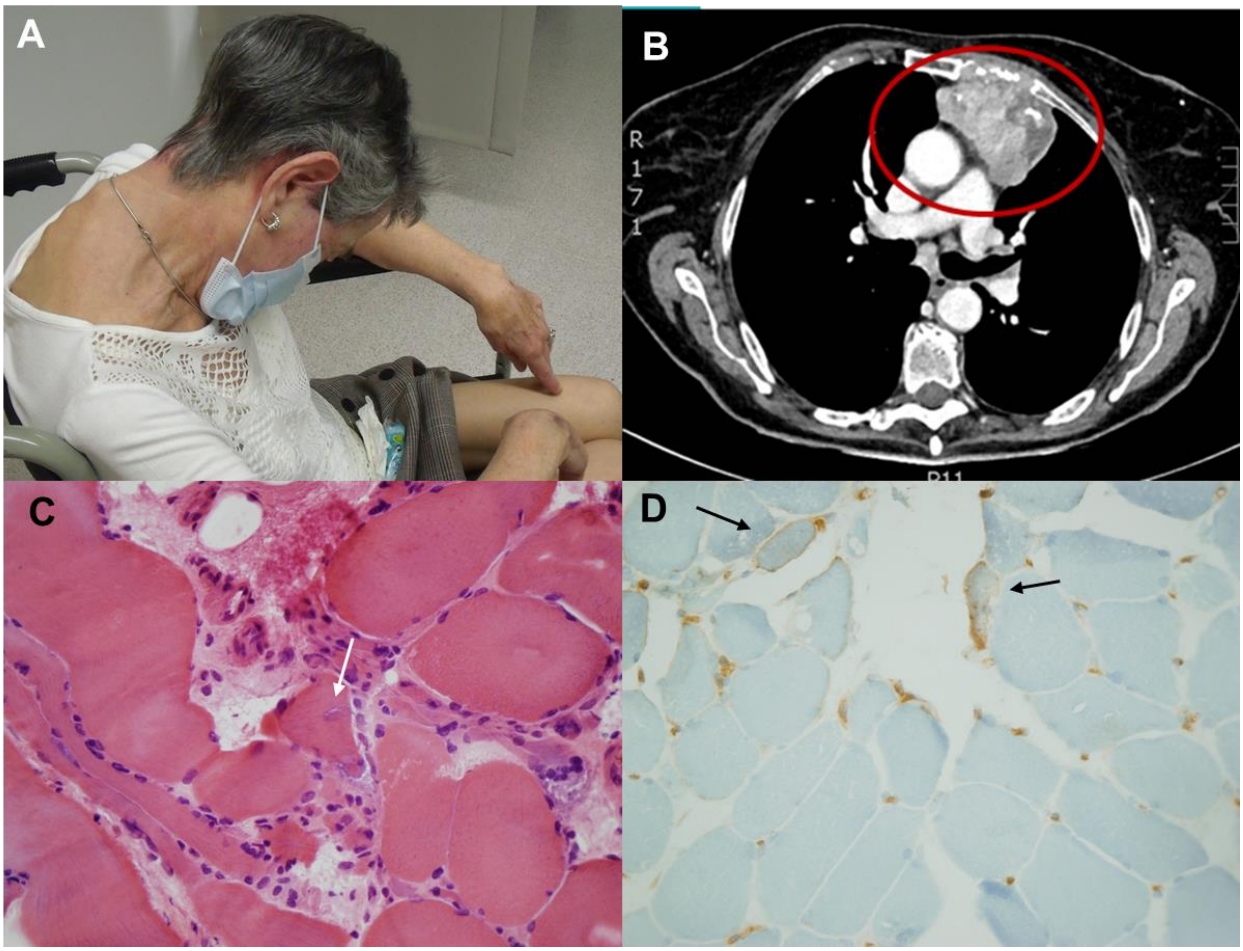

Figure 1: A) Weakness of neck extensor muscles with clinical sign of 'dropped head'. B) Chest CT scan showing heterogeneous lesion (circle) in anterior mediastinum compatible with thymoma. C and D: Microscopic images of muscle biopsy. C) Muscle fibers show irregular shapes, size variations, intense atrophy and alteration of their normal architecture, some of which show rimmed vacuoles (arrow). Regenerative changes are also observed (H&E; magnification x400).
D) Overexpression of MHC-I in muscle fibers (arrows) (magnification x400).

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CARCINOMA EOSINOFÍLICO DE CÉLULAS RENALES SÓLIDO Y QUÍSTICO EN PACIENTE PEDIÁTRICO CON ESCLEROSIS TUBEROSA: REPORTE DE CASO.

SOLID AND CYSTIC EOSINOPHILIC RENAL CELL CARCINOMA IN A PEDIATRIC PATIENT WITH TUBEROUS SCLEROSIS: CASE REPORT.

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RESUMEN
El carcinoma de células renales sólido y quístico, eosinofílico, es un subtipo raro de carcinoma renal de células claras, descrito desde 1976 e incluido en la última edición de la Clasificación de tumores urinarios y genitales de la OMS. Este carcinoma renal tiene una inmunohistoquímica característica CK20 positivo y CK7 negativo, su incidencia se desconoce y representa el 0.2% de todos los carcinomas renales de células claras. Su presentación suele ser indolente, pero existen registros de presentaciones más agresivas con enfermedad metastásica. Se reporta el caso de una paciente de 7 años con antecedentes de esclerosis tuberosa y lesión renal compleja de novo.

ABSTRACT
Eosinophilic solid and cystic renal cell carcinoma is a rare subtype of clear cell renal cell carcinoma, described since 1976 and included in the latest edition of the WHO Classification of Urinary and Genital Tumors. This renal carcinoma shows a characteristic CK20 positive and CK7 negative immunohistochemistry, its incidence is unknown and it represents 0.2% of all clear cell renal carcinomas. Its presentation is usually indolent, but there are records of more aggressive presentations with metastatic disease. The case of a 7-year-old patient with a history of tuberous sclerosis and de novo complex kidney injury is reported.

Keywords: Eosinophilic solid and cystic renal cell carcinoma, tuberous sclerosis, case report.
Palabras clave: carcinoma de células renales sólido quístico y eosinofílico, esclerosis tuberosa, reporte de caso.

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INTRODUCCIÓN

El carcinoma renal de células claras sólido y quístico eosinofílico es un subtipo raro de un carcinoma renal de células claras de reciente clasificación en la última edición de la OMS (Blue book) sobre tumores genitales y urinarios donde se han definido sus características morfológicas e inmunohistoquímicas (1,2). Se han reconocido dos formas de presentación de este carcinoma, siendo una esporádica y la otra asociada a esclerosis tuberosa.

CASO CLÍNICO

Paciente femenina de 7 años, con antecedentes patológicos de retraso del neuro-desarrollo y esclerosis tuberosa con afección cerebral y cardíaca (nódulos subependimarios y rabdomiomas ventriculares), y quistes renales de reciente diagnóstico (3 meses). Consultó al servicio de urgencias por fiebre objetiva, de difícil manejo, de 1 día de evolución y cambios en la coloración de la orina siendo diagnosticada de infección del tracto urinario bajo por E. coli; ingresó febril, taquicárdica y deshidratada por lo que se procedió a realizar estudios complementarios.

Se realiza ecografía de vías urinarias que reporta quistes renales simples y masa sólido-quística heterogénea en el riñón derecho, con sospecha inicial de angiomiolipoma vs tumor renal, motivo por el cual se solicita resonancia magnética nuclear (RMN) en la cual se reportan lesiones focales hepáticas y esplénicas correspondientes probablemente a hamartomas, múltiples quistes corticales en ambos riñones y una lesión principal del riñón derecho que podría corresponder a angiomiolipoma (Figura 1).

Debido a las características complejas de esta lesión, se hizo necesario definir su etiología con biopsia renal reportándose carcinoma de células renales sólido y quístico eosinofílico(Figura 2 A). Se programa para nefrectomía derecha.

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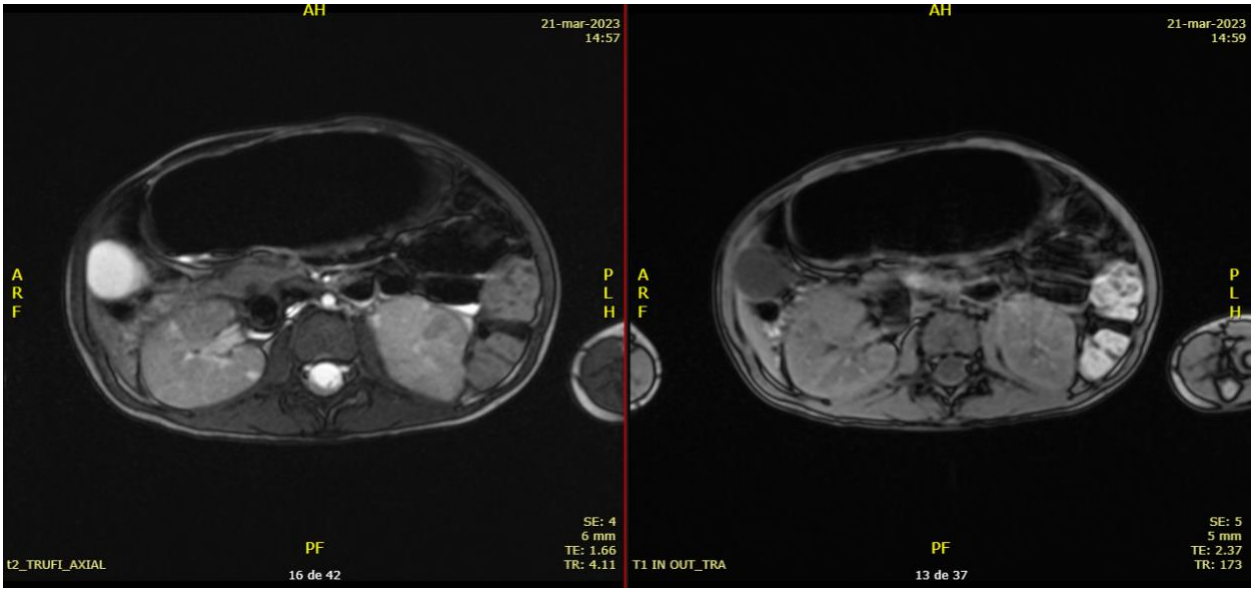

Figura 1. Resonancia magnética abdominal. Se observan lesiones focales hepáticas que corresponden muy probablemente a hamartomas con quistes corticales múltiples en ambos riñones y una lesión principal del riñón derecho que puede estar en relación con angiomiolipoma.

En el servicio de Patología se describe riñón derecho con peso de 77 gramos y que mide 7x6 cm, al corte lesión de color amarillo, de aspecto tumoral, con áreas quísticas, de 6x5 cm, que ocupa el 95% del parénquima renal, sin infiltrar la cápsula renal o comprometer el tejido graso. En los cortes histológicos se describe una neoplasia constituida por células epiteliales de mediano tamaño, con citoplasma amplio eosinófilo y núcleo redondo con nucléolo evidente, y distribuidas en un patrón sólido-papilar, acompañadas de histiocitos y alternando con áreas de cambio oncocítico y de aspecto quístico (Figura 2 B-D).

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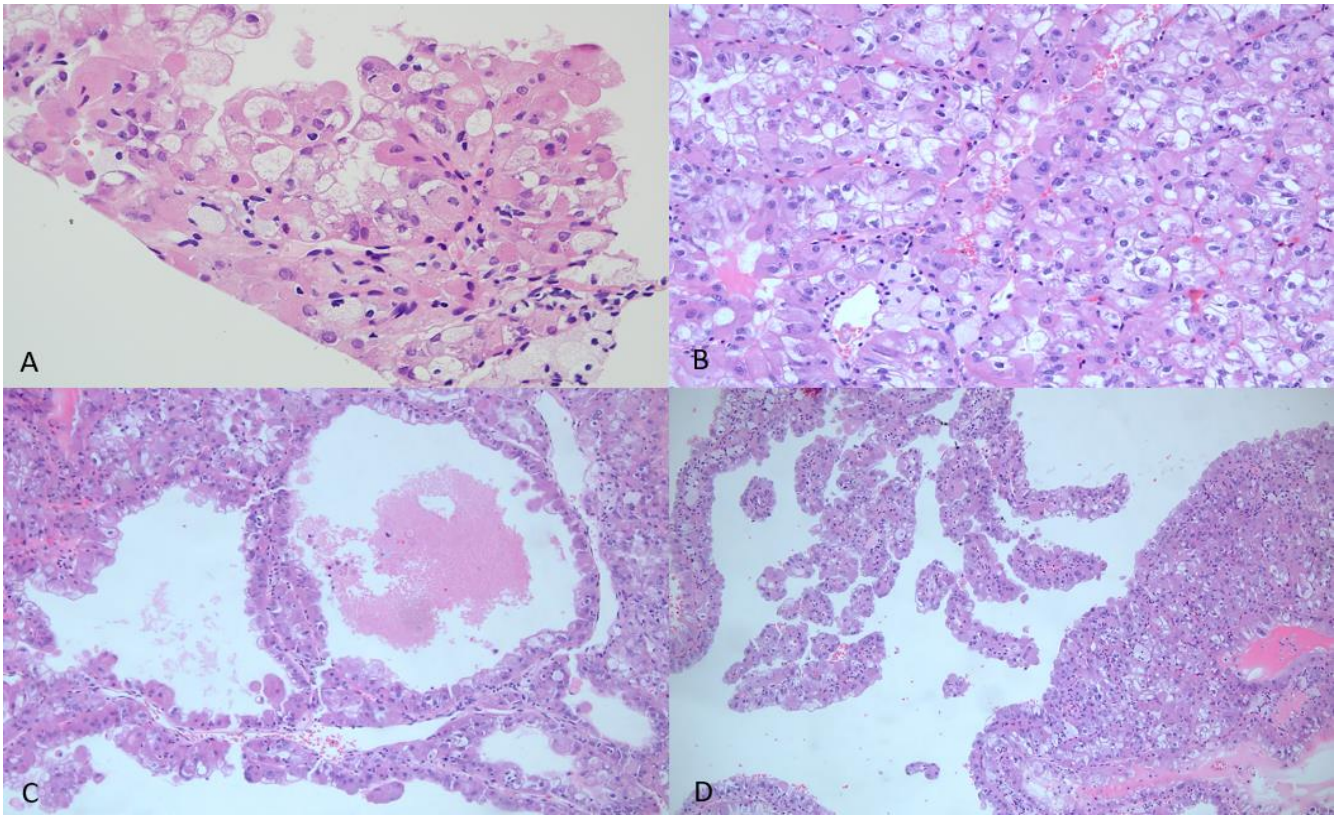

Figura 2. Hallazgos histológicos. A. biopsia renal que muestra neoplasia constituida por células epiteliales de citoplasma amplio, de aspecto oncocítico, que insinúan proyecciones papilares. B. en los cortes definitivos se observan células claras y oncocíticas, con núcleo redondo a ovalado, distribuidas en un patrón sólido. C. patrón quístico. D. patrón papilar.

Se solicitan marcadores de inmunohistoquímica: PAX8 y CK20 positivas, y CK7, CD117 y CD10 negativos. (Figura 3).

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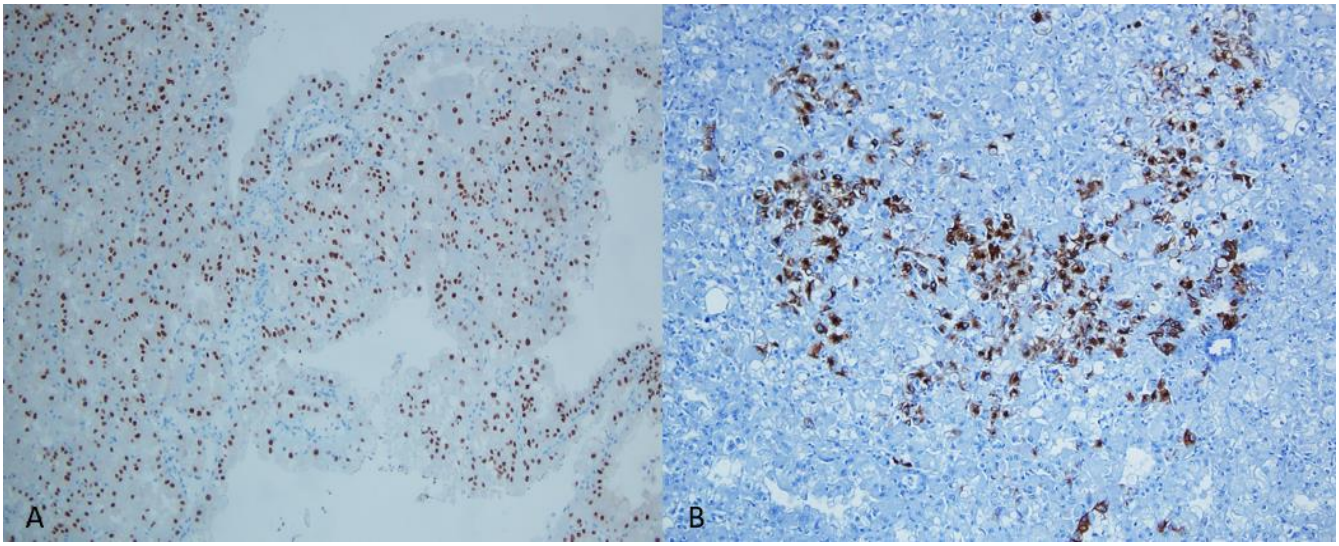

Figura 3. A. PAX 8, tinción positiva, intensa y difusa en las células neoplásicas. B. CD20, tinción positiva intensa y focal en las células neoplásicas.

De acuerdo a los hallazgos histológicos e inmunofenotípicos se diagnostica carcinoma de células renales sólido y quístico eosinófilo.
Se realizan exámenes adicionales para estudios de extensión en donde se encuentra una masa en la base pleural izquierda inespecífica que se decide no biopsiar por el alto riesgo de complicaciones, y una gammagrafía ósea sin evidencia de lesiones osteoblásticas sugestivas de metástasis.
Es dada de alta en aparentes buenas condiciones, con citas de seguimiento.

DISCUSIÓN

El carcinoma de células renales sólido y quístico eosinofílico (ESC-RCC) es un subtipo raro y relativamente nuevo del carcinoma renal de células claras (RCC), el cual fue descrito y reconocido originalmente en el 2016 y actualmente incluido en la última edición de la clasificación de los tumores urinarios y genitales de la OMS (1,2). Se define como una neoplasia epitelial constituida morfológicamente por células de citoplasma amplio, eosinófilo y granular, dispuestas en un patrón sólido y quístico, con inmunofenotipo característico (CK20 positiva/CK7 negativa). (1,3) De presentación infrecuente, representa aproximadamente el 0,2% de todos los RCC; pero, su incidencia se desconoce posiblemente porque muchos de estos tumores pudieron ser diagnosticados previamente como RCC no

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especificados o tumores oncocíticos no clasificables. (4,5)

La edad media de presentación es de 55 años, con una predilección por el sexo femenino; sin embargo, se reconoce que hasta en 10% de los pacientes, la neoplasia está asociada con antecedente de esclerosis tuberosa (trastorno sistémico de herencia autosómico dominante asociado a mutaciones en los genes TSC1 o TSC2), afectando principalmente a la población pediátrica; también, se ha descrito una forma esporádica, mucho más común, que se presenta predominantemente en mujeres, en un amplio rango de edad, y también asociada a mutaciones somáticas por pérdidas bialélicas en los genes anteriormente mencionados lo que genera como consecuencia una regulación al alza de la vía mTOR involucrada en la proliferación y supervivencia celular. (4,6)

Histológicamente, estas dos formas son indistinguibles entre sí, por lo que es fundamental la revisión de la historia clínica y la búsqueda de otras lesiones tumorales asociadas que puedan sugerir un origen sindrómico. (7)

Macroscópicamente, los ESC-RCC tienen tamaño promedio de 3 cm pudiendo alcanzar hasta 13 cm, son de color canela, superficie de corte heterogénea, sólida y quística, y la gran mayoría unifocales (se han informado casos de multifocalidad y bilateralidad). (4,8)

Histológicamente, la célula neoplásica es de mediano tamaño con un citoplasma amplio eosinófilo que puede contener gránulos basófilos dispersos, los núcleos son redondos u ovalados, con nucléolo evidente (grado nuclear 2 o 3), y se disponen en patrones alternantes entre sólidos quísticos y papilares. Las áreas sólidas pueden formar acinos o nidos grandes mientras que, las áreas quísticas pueden ser de tamaño variable y pueden estar presentes en escasa cantidad. (3,4)

El patrón de inmunohistoquímica característico es CK20 positivo/CK7 negativo. La CK 20 es positiva hasta en el 85% de los casos y puede ser focal o difusa; también, suelen ser positivos para PAX 8, vimentina, coctel de citoqueratinas y RCC, tienen marcación variable para Catepsina y Melan A, y son negativos para CD117, CAIX y HMB45. (7)

Su presentación típica es indolente; sin embargo, existe registro de un comportamiento más agresivo con enfermedad metastásica a hígado, glándula suprarrenal, ganglios linfáticos, pulmón, hueso; se estima que la tasa de metástasis es del 5%. (1,7,9)

Actualmente, hay ensayos clínicos que muestran resultados prometedores para el tratamiento de los tumores en etapas avanzadas con inhibidores del mTOR. (2,3)

CONCLUSIÓN

El carcinoma renal de células claras sólido y quístico eosinofílico es un subtipo de carcinoma renal de células claras con un patrón inmunohistoquímico característico (CK20 positivo/CK7 negativo), y aunque su incidencia es desconocida y su presentación rara, debe tenerse en cuenta entre las posibilidades diagnósticas de una masa renal asociada a otras lesiones tumorales sistémicas.

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ASPECTOS ÉTICOS

I. Protección de personas y animales
Los autores declaran que para esta investigación no se han realizado experimentos en seres humanos ni animales.

II. Confidencialidad de los datos
Los autores declaran que han seguido los protocolos de su centro de trabajo sobre la publicación de datos de pacientes.

III. Financiamiento
La presente investigación no ha recibido ninguna beca específica de agencias de los sectores públicos, comercial, o con ánimo de lucro.

IV. Conflicto de intereses.
Los autores declaran no tener conflictos de interés.

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