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Uveitis as an ophthalmologic manifestation of autoimmune diseases: A detailed analysis of the clinical implications.

Uveítis como manifestación oftalmológica de enfermedades autoinmunes: Un análisis detallado de las implicaciones clínicas

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Abstract

Uveitis, an ocular condition characterized by inflammation of the middle layer of the eye, can manifest itself in association with various systemic diseases, with autoimmune diseases being a prominent component. Its complexity lies in its etiological diversity and the variety of clinical manifestations, ranging from mild to severe presentations. The aim of this research is to analyze the prevalence and characteristics of uveitis in the context of autoimmune diseases, and to examine the associated clinical repercussions. A comprehensive literature review was conducted using specialized databases, the sample comprised epidemiological studies and systematic reviews related to AD and associated rheumatic diseases. The results revealed a significant prevalence of uveitis in patients with

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AS, highlighting the importance of ophthalmologic surveillance in this population.

Keywords: non-infectious uveitis, ocular immunology, rheumatic diseases, ocular manifestations, autoimmune diseases.

Resumen

La uveítis, una afección ocular caracterizada por la inflamación de la capa intermedia del ojo, puede manifestarse asociada a diversas enfermedades sistémicas, siendo las autoinmunes un componente destacado. Su complejidad reside en su diversidad etiológica y la variedad de manifestaciones clínicas, que van desde formas leves hasta presentaciones severas. El objetivo de esta investigación es analizar la prevalencia y características de la uveítis en el contexto de enfermedades autoinmunes, y examinar las repercusiones clínicas asociadas. Se llevó a cabo una revisión bibliográfica exhaustiva utilizando bases de datos especializadas, la muestra comprendió estudios epidemiológicos y revisiones sistemáticas relacionadas con la EA y enfermedades reumáticas asociadas. Los resultados revelaron una prevalencia significativa de uveítis en pacientes con EA, destacando la importancia de la vigilancia oftalmológica en esta población.

Palabras clave: Uveítis no infecciosa, inmunología ocular, enfermedades reumáticas, manifestaciones oculares, enfermedades autoinmunes.

Introduction

Uveitis is the most frequent ophthalmologic finding in the practice of rheumatology and clinical immunology. This condition, often of unknown origin, is characterized by inflammation of the uvea, which encompasses the iris, ciliary body and choroid, fundamental

components of the middle eye. The anterior variety of uveitis impacts the iris and ciliary body, while the posterior form is restricted to the retina and choroid. Both presentations demand immediate evaluation by an ophthalmologist, since untreated cases can lead to severe visual problems, including blindness (Takeuchi et al., 2021).

Current literature reveals that uveitis, although commonly associated with systemic autoimmune diseases, can also present as a primary or idiopathic entity. This aspect underscores the need for a thorough understanding of the autoimmune mechanisms that trigger and perpetuate intraocular inflammation.

It also highlights the importance of biomarkers in the early identification of uveitis associated with autoimmune diseases. The detection of specific autoantibodies and inflammatory cytokines could not only facilitate more accurate diagnosis, but also open new avenues for the development of targeted therapies (Sen & Ramanan, 2020).

Although the pathogenesis of uveitis is not yet fully understood, an imbalance has been observed between effector T cells (Th1 and Th17), which have effector and pathogenic functions, and regulatory T cells (Treg), which play a crucial role in immunomodulation and tolerance. In addition, proinflammatory cytokines play an essential role in the pathophysiological mechanisms of uveitis. Elevated levels of interleukin-6 (IL-6), IL-17, IL-23 and tumor necrosis factor alpha (TNF **α)** have been identified in the blood and other ocular fluids of patients with uveitis of various etiologies (Egwuagu et al., 2021)

Immunoprivilegiation is a feature present at certain sites in the body, such as the brain, reproductive organs and the eye, and refers to a set of complex molecular processes designed to regulate inflammation and prevent potential damage to specialized tissues. The eye, in particular, exhibits a unique immune system that incorporates regulators and inhibitors of the immune response, thus playing a crucial role in modulating the response to the presence of antigens. This immune privilege is constitutively manifested in structures such as the cornea, retina and anterior chamber of the eye (Mölzer et al., 2020).

The immune system uses four classic mechanisms to prevent autoimmunity: clonal selection, active suppression, immune privilege and clonal inactivation. Due to the uniqueness of the eye, these mechanisms operate in a particular way. (De Revisión & Muravchik, 2023).During eye ontogeny, the eye becomes a sequestered organ. Before the thymus is fully developed, some ocular antigens may never reach the thymus. As a result, lymphocytes carrying antigen receptors capable of recognizing these antigens are not eliminated (Bertrand et al., 2019).

T lymphocytes that are specific for ocular antigens reach the bloodstream with a frequency of one to five precursors per million cells. Despite the presence of these autoreactive cells in the blood, most people do not develop uveitis. This apparent protection is attributed to the fact that the eye is considered an immunoprivileged site.

Inflammatory eye diseases have been recognized since ancient times, although only in recent times has progress been made in defining more precisely the mechanisms underlying this phenomenon. In the middle of the last century, the belief was held that most cases of uveitis were caused by infectious agents, such as those linked to diseases like syphilis and tuberculosis (Joltikov & Lobo-Chan, 2021).However, the significant contribution of endogenous immunomodulatory mechanisms in these disorders, which, together with genetic and environmental factors, form an essential triad, has now been clearly evidenced. Research in animal models has highlighted the crucial role of T cells in many of these disorders. The development of T-cell lines has allowed a better understanding of cellular interactions during ocular inflammatory episodes. The presence of uveitogenic antigens in the eye also raises the significant possibility of the occurrence of autoimmune processes (Joltikov & Lobo-Chan, 2021).

The problem with this relationship lies in the growing evidence of an intricate connection between uveitis and various autoimmune diseases, such as rheumatoid arthritis, ankylosing spondylitis, Behçet's syndrome, among others. Uveitis can manifest as a primary

entity or secondary to these systemic disorders, complicating the diagnosis and clinical approach.

In this context, the problem formulation focuses on the need for accurate and early identification of the relationship between uveitis and autoimmune disorders. The lack of uniform criteria for the evaluation and management of uveitis in the context of autoimmune diseases highlights the urgency of addressing these gaps in medical care.

The objectives of this article comprise a comprehensive review of the current scientific literature to understand the bidirectional relationship between uveitis and autoimmune diseases. In addition, we seek to identify risk factors and clinical patterns that may improve the clinical management of patients with these conditions.

This research is based on the need to integrate knowledge from ophthalmology and rheumatology, recognizing the interdisciplinarity required to comprehensively address uveitis in the context of autoimmune diseases. This theoretical perspective will provide a solid framework to critically analyze the existing scientific literature and draw meaningful conclusions to guide clinical practice and future research.

Methodology

This study is part of a literature review and critical analysis of the scientific literature. The methodology adopted is based on the compilation, review and synthesis of previous studies related to uveitis as an ophthalmologic manifestation of autoimmune diseases. This approach allows us to consolidate and comprehensively evaluate the existing evidence in the medical literature, providing a holistic view of the clinical implications of uveitis in the autoimmune context.

Given the nature of literature review research, the "sample" of this study comprises a wide range of scientific articles, systematic reviews and meta-analyses published in specialized databases. Studies addressing the relationship between uveitis and autoimmune

diseases were included, with a particular emphasis on research exploring clinical, diagnostic and therapeutic aspects, published within the last 7 years.
The search strategy is carried out comprehensively in databases such as PubMed, Scopus, Google Scholar and Web of Science, as well as university repositories, using a combination of keywords and specific search terms. MeSH (Medical Subject Headings) terms are used in PubMed to optimize search precision.

In addition, Boolean operators such as AND, OR, and NOT are applied to refine the search and ensure the inclusion of relevant studies. Synonyms and related terms are also considered to encompass the diversity of the literature. The combination of these elements ensures a comprehensive and accurate search.

Inclusion and exclusion criteria are established, considering the relevance and quality of the selected studies. These criteria ensure that the information collected is relevant to the subject of the study, contributing to the soundness and validity of the review.

Thematic Relevance: Studies should specifically address the relationship between uveitis and autoimmune diseases. Papers exploring clinical, diagnostic and therapeutic aspects of this association will be included.

Publication Period: Studies published in the last 7 years (2016-2023) will be considered to ensure the inclusion of recent research and to reflect the current state of knowledge in the field.

Type of Study: Systematic reviews, meta-analyses, observational studies (cohort, case-control), clinical trials and experimental studies that provide relevant information on uveitis and its connection with autoimmune diseases will be included.

Language: Studies written in English and Spanish will be accepted to ensure geographic and linguistic diversity.

Exclusion Criteria:

Thematic Irrelevance: Studies that do not specifically address the relationship between uveitis and autoimmune diseases will be

excluded, as well as those that do not provide clinically relevant information.

Publication Period: Studies published within the last 7 years are excluded to ensure the inclusion of recent and relevant research.

Type of Study: Non-original papers, such as editorials, letters to the editor and conference abstracts, as well as those with insufficient or low quality methodologies will be excluded.

Language: Studies in languages other than English and Spanish are excluded, as the team's ability to evaluate and synthesize information in those languages may be limited.

Full Text Access: Access to the full text of the study will be required for a complete review of the information. Studies without access to full text or with limited information will not be considered.

In this study, the systematic review methodology was used to rigorously approach the analysis of the scientific literature related to the specific topic. Following the guidelines and principles established for this methodology, a transparent and reproducible process is guaranteed. To efficiently manage the information collected, bibliographic management tools were used, among which the specialized software Mendeley stands out. This tool facilitates the organization and management of bibliographic references, enabling the creation of digital libraries and the automatic generation of citations and bibliographies.

The selection of studies was carried out in a transparent and replicable manner, applying predefined inclusion and exclusion criteria to ensure the relevance and quality of the selected studies.

The methodological quality of the studies was assessed using specific tools adapted to the nature of each type of research, such as AMSTAR for systematic reviews and NOS for observational studies.

Finally, the narrative synthesis integrates and summarizes the key findings of the selected studies in a descriptive manner. Patterns, discrepancies and trends in the results were identified, providing a comprehensive and coherent overview of the available evidence. This

approach highlights clinical implications and provides guidance for possible future research directions.

Results

Uveitis may present as primary or secondary to various conditions, especially its association with systemic autoimmune rheumatic diseases (SARD). Within the secondary forms, two main types are distinguished: "anterior" uveitis, also known as iridocyclitis or iritis, which affects the iris and ciliary body; and "posterior" uveitis, called chorioretinitis, which usually involves the retina and choroid (Rosenbaum et al., 2019).

The prevalence of uveitis varies according to regions and detection methods, being estimated at around 1/4500 in the general population, being more frequent in the range of 20 to 60 years of age with equal representation in both sexes (García-Aparicio et al., 2021).

In the context of ARDS, uveitis can manifest as an acute episode affecting one eye, evolving in some cases into a chronic inflammatory process. It is crucial to perform a rigorous study for an accurate diagnosis and classification, to initiate treatment immediately and to evaluate possible complications.

Etiopathogenesis

Most cases of uveitis are sporadic and of unknown etiology, but may be associated with ARDS or syndromes affecting various ocular structures. Non-infectious or autoimmune causes, such as HLA-B27-related uveitis, have specific clinical features, such as male predominance, unilateral acute onset and recurrences. The inflammatory process is supported by Th17 cells and proinflammatory cytokines, contributing to the unbalanced ocular immune response, which can lead to ocular tissue damage and perpetuate the inflammatory process (Fanlo et al., 2021).

Immune disorders affecting the eye are commonly divided into two main categories: antibody-mediated diseases and cell-mediated

diseases. Autoimmunity, as a rule, develops when the aforementioned safeguarding mechanisms fail (Kemeny-Beke & Szodoray, 2020).

In the context of uveitis, both in experimental models and in humans, the breakdown of the blood-retinal barrier marks the onset of the autoimmune process and, in some cases, serves as a triggering factor. Thymic presentation of ocular antigens has been shown to be crucial in the development of uveitis, as evidenced by experiments with rats susceptible to experimental autoimmune uveoretinitis (Sabat, 2020).

(Zhong et al., 2023), in theirstudies states that activation of T lymphocytes in response to eye-specific antigens, such as arrestin (S-Ag), in the thymus can induce an autoimmune response in the eye. Furthermore, in animal models of autoimmune uveitis, it has been observed that uveitogenic T lymphocytes can migrate to the periphery after reactivation against retinal antigens, which is also reflected in patients with middle and posterior uveitis.

After activation of T lymphocytes that recognize uveitogenic epitopes, migration into the eye is initiated, triggering a series of events that lead to destruction of the photoreceptor layer and visual loss. Although any activated T lymphocyte can penetrate the retina, only cells that recognize the pathogenic epitopes continue into the retina, breaking the blood-retinal barrier by secreting cytokines (Bertrand et al., 2019).

In experimental autoimmune uveitis, mast cell degranulation has been observed in the choroid, suggesting lgE-independent, possibly complement-mediated activation. In multiple forms of uveitis, inflammatory cells such as macrophages, neutrophils, antigen-presenting cells, and T lymphocytes play a crucial role, and their presence characterizes the hallmark of uveitis (Huguet Rodriguez et al., 2022).

Classification:

Uveitis is classified according to the primary anatomic site of inflammation, distinguishing between anterior, intermediate and posterior uveitis. Panuveitis, on the other hand, involves inflammation of all three components of the uvea. In an epidemiological study

conducted in Northern California, a prevalence of uveitis was estimated at 115/100,000 persons, with an incidence ranging from 47.1 to 52.4/100,000 person-years. On the other hand, prevalence estimates of NIU (Noninfectious Uveitis) based on administrative claims from 14 million privately insured persons in the United States were 121/100,000 persons (Joltikov & Lobo-Chan, 2021).

Anterior uveitis stands out as the most common form of uveitis, accounting for 81% of all cases of UIN, with a prevalence of 98/100,000 adults, according to a retrospective analysis of claims in the U.S. Intermediate, posterior infections and non-infectious panuveitis accounted for 0.9% (prevalence, 1/100,000), 8.6% (prevalence, 10/100,000) and 9.6% (prevalence, 12/100,000), respectively. These data highlight the significant prevalence of anterior uveitis compared to other forms in the adult population (Sabat, 2020).

Anterior uveitis

Anterior uveitis, which accounts for approximately three-quarters of all uveitis cases, has an incidence of 8 per 100,000 population. Although more manageable, these uveitis can lead to serious complications, such as glaucoma and macular edema, ultimately leading to blindness. Among the most common causes of anterior uveitis are spondyloarthropathies, which are classified as histocompatibility antigen HLA-B27-related uveitis. This antigen not only predisposes to anterior uveitis, but is also associated with various spondyloarthropathies, such as ankylosing spondylitis, Reiter's syndrome, psoriatic arthritis, and inflammatory bowel disease (IBD) (Sabat, 2020).

HLA-B27 haplotype-linked uveitis is a unique entity characterized by its anterior, acute, relapsing and unilateral nature in each episode. Although less chronic than other forms of anterior uveitis, they are usually more severe due to high inflammatory activity during flares. These uveitis more frequently affect males and individuals of slightly younger age compared to patients with HLA-B27-negative uveitis. The presence of the HLA-B27 haplotype is significant, as it suggests possible pathogenic mechanisms, such as the interaction of gram-negative bacteria with HLA class I antigens in triggering anterior

uveitis. However, it is important to note that antibiotic treatment has not been shown to improve or reduce the recurrence of these inflammatory episodes (Fuseau et al., 2023).

Patients with anterior uveitis, either with or without associated sacroiliitis, have been observed to have non-symptomatic intestinal inflammatory infiltrates.

Intermediate uveitis

The main focus of inflammation is located in the vitreous humor. Clinical symptoms include blurred vision, the presence of floaters and sensitivity to light. Representative origins include malignant neoplasms, sarcoidosis and multiple sclerosis. Pars planitis, which is the idiopathic form of intermediate uveitis, is characterized by the presence of "snow banks" (white exudates over the pars plana and ora serrata) and "snowballs" (aggregates of inflammatory cells in the vitreous) (Rosenbaum et al., 2019).

Posterior uveitis

the primary sites of inflammation are the retina and/or choroid, presenting with focal, multifocal or diffuse manifestations of choroiditis. Clinical symptoms include floaters, and pain and redness are generally not experienced. Representative associated diseases include autoimmune disorders, Behçet's disease, and sarcoidosis (Rosenbaum et al., 2019).

Panuveitis

The anterior chamber, vitreous humor, and retina and/or choroid are affected. Clinical symptoms include floaters, pain, redness, and light sensitivity. Representative associated diseases include autoimmune disorders, sarcoidosis, Vogt-Koyanagi-Harada syndrome, and Behçet's disease (Rosenbaum et al., 2019).

Relationship with the microbiome

In the pathophysiology of chronic or recurrent inflammation, the microbiome may serve as a source of antigens and antigen-specific T cells. The intestinal microbiota, the most prevalent in humans with

approximately 10^4 microorganisms, is mainly composed of Firmicutes and Bacteroidetes, followed by Actinobacteria and Proteobacteria, and to a lesser extent by Fusobacteria and Verrucomicrobia (Mölzer et al., 2020).This microbiome is established at birth by maternal transmission and undergoes constant changes to achieve a homeostatic balance with the host immune system, influenced by factors such as diet, chronic stress, circadian rhythm, exposure to drugs, toxins, colonization by other external microorganisms and various diseases (Kalogeropoulos et al., 2022).

The intestinal microbiota plays a key role in a variety of physiological functions, including regulation of the immune system by modulating innate and adaptive responses. Dysbiosis, an alteration in the composition of the microbiota, can affect the immune system and induce disease (Colmán et al., 2022).Experimental studies have evidenced a relationship between dysbiosis and immune-mediated diseases, and it has been observed that certain bacterial strains can promote Th17 differentiation in the intestine, being associated with immune-mediated diseases such as non-infectious uveitis. On the other hand, some bacterial species favor Treg cell differentiation, contributing to immune system homeostasis. Dysbiosis has been linked to the pathogenesis of uveitis through several mechanisms, including antigenic mimicry, destruction of the intestinal barrier due to increased permeability of the intestine, loss of immune homeostasis at the intestinal level, and reduced synthesis of anti-inflammatory metabolites (Colmán et al., 2022).

Diseases Associated with Uveitis

Ankylosing spondylitis: genetically associated with HLA-B27 in a high percentage of patients, it presents a 30% incidence of anterior uveitis, being more frequent in men. Arthritis is the main manifestation, and response to treatment with topical steroids is common (Guajardo, 2019).

Juvenile rheumatoid arthritis: this disease, the most commonly associated with uveitis, presents with diverse symptoms, including anterior uveitis, keratitis and secondary cataracts. The pauciarticular form is the most prevalent, affecting more girls than boys. Rheumatoid factor is generally negative, and treatment may include

topical steroids, systemic steroids, azathioprine and cyclosporin (Huguet Rodriguez et al., 2022).

Inflammatory Bowel Disease: Anterior uveitis is the most common manifestation in this disease, with a frequency of 60% in HLA-B27 positive individuals. In Crohn's disease, uveitis may be bilateral, chronic and associated with retinal vasculitis.

Psoriasis Approximately 7% of patients with psoriasis develop arthritis, and 7% of these patients develop uveitis (Mudie et al., 2022)

Sarcoidosis: affects up to 20% of patients initially ocular, presenting uveitis in 7% of cases. It can be anterior, posterior or intermediate, the latter being less frequent (Davis, 2020).

Behcet's disease: mainly affects the posterior segment of the eye, and recurrent iridocyclitis is the most significant ocular manifestation. It is more common in females, with a high probability of bilateral presentation (Contreras Abarca et al., 2020).

Multiple sclerosis: demyelination of the optic nerve leads to optic neuritis, and uveitis occurs in a range of 2.4 to 27%, manifesting as peripheral uveitis (Guajardo, 2019).

Vogt-Koyanagi-Harada syndrome: this bilateral and diffuse panuveitis with retinal detachment is more common in Asians. It presents with blurred vision and multifocal manifestations in the choroid, followed by a chronic phase characterized by choroidal depigmentation. It is the second leading cause of uveitis in Saudi Arabia and accounts for 9.2% in Japan (Lam et al., 2020).

The intrinsic connection between rheumatic diseases and ocular complications is an important and complex facet that requires a comprehensive understanding.

In a study conducted by (Guajardo, 2019)highlights that patients suffering from Ankylosing Spondylitis (AS) experience uveitis in approximately 25% of cases throughout their disease. In a significant number of cases, uveitis may manifest as the first symptom of the disease, and in many other cases, it helps to identify a barely symptomatic low back pain.

In 80% of cases, both eyes are affected, although they rarely become inflamed simultaneously. For this reason, it is classified as a unilateral uveitis in each episode, although flare-ups may affect both eyes at different times. This type of uveitis is predominantly anterior, i.e., an iritis or iridocyclitis, and its course is acute, presenting symptoms such as pain, red eye, photophobia and decreased vision. (Guajardo, 2019)

(Fanlo et al., 2021) states that the use of the slit lamp (biomicroscopy) facilitates the observation of aqueous humor turbidity caused by excess proteins and cells. These cells may also adhere to the posterior aspect of the cornea, resulting in retrokeratotic precipitates. Uveitis tends to be recurrent, with some patients experiencing monthly flare-ups.

It is characteristic for those who have had multiple flare-ups to perceive the approach of a recurrence up to 24 hours earlier, even when the slit lamp examination is apparently normal. Decreased vision during the attack is primarily due to a clouding of the aqueous humor and occasionally to secondary macular edema. In addition, the iris tends to adhere to the lens (posterior synechiae) and to the corneal periphery (anterior synechiae) as a result of the inflammatory process (Kemeny-Beke & Szodoray, 2020)..

On the other hand, (Sabat, 2020) in his research, details that (AD) affects males more frequently, with an incidence of approximately 2.5 to 3 times more than in females. Women generally experience a milder form of the disease, with more peripheral joint involvement.

(Fuseau et al., 2023)in their research on Reiter's syndrome (RS), characterizes the triad of arthritis, urethritis and conjunctivitis. It affects mainly males, and joint manifestations may include tenosynovitis, plantar fasciitis, sacroiliitis and inflammatory oligoarthritis. Uveitis occurs in 3-12% of cases and is similar to that seen in patients with AS.

(Bertrand et al., 2019)according to an observational study involving 7641 patients, 55.8% manifested ocular symptoms, with anterior and posterior uveitis standing out as the most frequent, affecting 41% and 46%, respectively. Retinal vasculitis, cataracts and conjunctivitis affected 33%, 24% and 6% of patients, respectively.

Regarding Behçet's syndrome (Contreras Abarca et al., 2020)states that it is characterized by non-granulomatous intraocular inflammation and retinal vasculitis of intermittent course, presenting as recurrent self-limited exacerbations, which generate a potentially irreversible cumulative damage. In his study, he has observed that ocular damage tends to be more pronounced in men than in women, arising on average between 2 and 3 years after the onset of symptomatology. Initially, it manifests unilaterally and progresses to bilateral involvement, both symmetrically and asymmetrically. It has been shown that up to 8.6% of patients debut with ocular symptoms as their first manifestation. Uveitis stands out as one of the most frequently reported conditions, underscoring the importance of performing a thorough differential diagnosis during evaluation. This uveitis can involve both the anterior and posterior segments, or even both simultaneously (panuveitis). (Contreras Abarca et al., 2020).

Psoriatic arthropathy affects about 30% of patients with psoriatic arthritis, according to. (Hysa et al., 2021)and up to 30% of these experience ocular involvement. Conjunctivitis occurs in 20% of cases, while unilateral relapsing acute anterior relapsing uveitis manifests in 7-10%. Ocular involvement is more frequent in male patients with psoriasis of the scalp or ciliary areas, and in those with arthritis, especially sacroiliitis and spondylitis. (Barbini et al., 2023).

Inflammatory Bowel Disease (IBD), which includes Ulcerative Colitis (UC) and Crohn's Disease (CD), is a chronic disorder of unknown etiology, (Kalogeropoulos et al., 2022b)reports that the incidence of these diseases is 10.4 and 5.6 per 100,000 inhabitants/year, respectively. Genetic factors and external triggers are believed to be involved in their development, and clinical manifestations can affect any part of the gastrointestinal tract. Ocular manifestations in IBD vary, and the incidence ranges from 3.5 to 11.8%. Episcleritis and scleritis are most common, but there may also be corneal involvement, uveitis and other complications. As for Rheumatoid Arthritis (RA). (Giancane et al., 2016), evidence that, between 20-35% of patients may develop ocular manifestations, such as uveitis, keratoconjunctivitis sicca, episcleritis, scleritis and corneal involvement. Corneal involvement can present in different forms, such as corneal ulcers and peripheral corneal thinning. Treatment focuses

on the use of artificial tears and, in severe cases, immunosuppressants may be required.

For his part, (Rosenbaum et al., 2019), affirms thatin Juvenile Idiopathic Arthritis (JIA), which corresponds to an inflammatory connective tissue disease in children, approximately 20% of cases are associated with chronic uveitis. Although most ocular flares occur during the first year of JIA, even after several years of joint inactivity, episodes of uveitis may occur.

Conclusions

Ocular inflammation represents a common clinical manifestation in several systemic autoimmune diseases, playing a crucial role. Within this group of pathologies, different clinical entities associated with specific patterns of uveitis and other ocular manifestations have been identified. Discriminating patterns have been established linking particular forms of uveitis, including relapsing unilateral acute anterior uveitis, with specific systemic diseases, including those of a rheumatologic nature.

Relapsing unilateral acute anterior uveitis stands out as the most common presentation in spondyloarthropathies, and can sometimes act as the initial symptom of a previously undiagnosed underlying spondyloarthropathy. The identification of uveitis as a possible initial symptom in some cases of AS such as Behçet's Syndrome, Inflammatory Bowel Disease (IBD) and Rheumatoid Arthritis (RA), among others, underscores the need for close collaboration between rheumatologists and ophthalmologists, this multidisciplinary approach allows early identification, accurate diagnosis and effective management of autoimmune diseases and their ocular manifestations, thus improving the quality of life and prognosis of those affected. A thorough understanding of these clinical patterns contributes to more personalized care and the implementation of specific therapeutic strategies, promoting a comprehensive approach to the care of patients with these complex medical conditions.

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