



CASE PRESENTATION

Nephrotic syndrome as a consequence of secondary syphilis. Presentation of a case

*Síndrome nefrótico como consecuencia de una sífilis secundaria.
Presentación de un caso*

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ABSTRACT

Introduction: among the causes of nephrotic syndrome are systemic and infectious ones such as syphilis. During secondary lueticism all organs can be affected, however kidney damage is rare. It is characterized by progressive

edema, until it becomes generalized, foamy urine, dyslipidemia, together with characteristic skin lesions.

Objective: to present an adult male patient with nephrotic syndrome and coincident syphilitic secondary syndrome.

Case presentation: the case presented consists of a patient with nephrotic syndrome, coinciding with secondary syphilis.

Conclusions: this study allowed us to observe the small number of published cases with a diagnosis of nephrotic syndrome and secondary syphilis. It is an example of the association between both pathologies and the importance of ruling out secondary causes when faced with nephrotic syndrome.

Key words: Kidney Diseases; Sexually transmitted diseases; Syphilis; Nephrotic syndrome

RESUMEN

Introducción: entre las causas de síndrome nefrótico se encuentran las sistémicas e infecciosas como la sífilis. Durante el secundarismo luético todos los órganos pueden afectarse, sin embargo la afección renal es infrecuente. Se caracteriza por edemas progresivos, hasta generalizarse, orinas espumosas, dislipidemias, unidas a lesiones en piel características.

Objetivo: presentar un paciente adulto masculino con síndrome nefrótico y secundarismo sífilítico coincidente.

Presentación de caso: el caso presentado consiste en un paciente portador de un síndrome nefrótico, coincidente con una sífilis secundaria.

Conclusiones: este estudio permitió observar el poco número de casos publicados con diagnóstico de síndrome nefrótico y sífilis secundaria. Es una muestra de la asociación entre ambas patologías y la importancia que tiene, ante un síndrome nefrótico, descartar causas secundarias.

Palabras claves: Enfermedades Renales; Enfermedades de Transmisión Sexual; Sífilis; Síndrome Nefrótico

INTRODUCTION

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Nephrotic Syndrome is one of the five major glomerular syndromes with which glomerular diseases occur in daily clinical practice, constituting without a doubt one of its most expressive forms of presentation. It reflects a dysfunction at the level of the glomerular filtration barrier that allows the passage of macromolecules such as albumin. This gives rise to a clinical-humoral syndrome characterized by the presence of: severe proteinuria, hypoproteinemia, hypoalbuminemia, edema, hyperlipidemia-lipiduria, variable degrees of oliguria, hypercoagulability and a series of metabolic disorders secondary to protein loss. ⁽¹⁾

The causes of nephrotic syndrome are very diverse. When we do not know their etiology we call them idiopathic nephrotic syndrome; those with early onset or the first year of life, which are mostly genetic, are called congenital and infantile; and finally there are nephrotic syndrome secondary to specific etiologies, systemic or infectious diseases, not so common in childhood. Syphilis or syphilis is among the rare secondary causes of nephrotic syndrome, especially in children. ⁽¹⁾

Renal involvement in syphilis has been mentioned in medical literature for more than one hundred years. The descriptions and especially the clinicopathological classifications have been changing since the beginning of the century according to the evolution of scientific knowledge. Nephrotic syndrome in relation to the early stages of lues (end of the primary period and especially the secondary period) is well known although rare, its incidence would be less than 0,3 % of cases. ⁽²⁾

The outstanding characteristics of the condition are usually the acuteness of its presentation, the association with the manifestations of syphilitic secondaryism, strongly positive serological tests for lues, absence of other concomitant causes of kidney disease, preserved kidney function and its complete resolution spontaneously or later of adequate treatment. ⁽³⁾

The increase in incident cases of sexually transmitted infections in Cuba in recent years is notable, the increasingly early initiation of sexual relations, unprotected practices and the recognition of the potential curability through specific treatment of both conditions. Therefore, the objective is to present an adult male patient with nephrotic syndrome and coincident syphilitic secondary syndrome.

CASE PRESENTATION

Mixed-race male patient, 57 years old, with no personal pathological history, with risky heterosexual practices, who admits to having had several sexual partners and unprotected sex. He came for consultation due to progressive edema in the lower limbs that reached the middle third of the leg, in both hands, facial bloating and foamy urine. He is treated by the doctor from his unit who decides to refer him to the Matanzas military hospital "Dr. Mario Muñoz Monroy", where he is evaluated by Internal Medicine and admission is decided for better study and treatment.

The physical examination revealed generalized edema with renal characteristics; he was normotensive and afebrile, with no other positive element to point out. A study is indicated and while waiting for said analysis, skin lesions appear, not confirmed during the initial physical examination, which appear to be syphilitic roseola.

The results showed a hemoglobin level of 10,6 g/l, an erythrocyte sedimentation rate of 105 vol, and a leukogram of 13×10^9 . Within the blood chemistry, urea at 7,8 mmol/l, Creatinine at 178 mmol/l, uric acid at 407 mmol/l, cholesterol 6,9 mmol/l, triglycerides 2,6; glomerular filtration rate 43,2 ml/min, TGP 25, TGO 13, GGT 24, alkaline phosphatase: 132, total protein 54, albumin 26, 24-hour proteinuria 3,5 g. Cyturia with slight leukocyturia (40 000/ml) and presence of protein, rest within normal values, abdominal, renal and prostate ultrasound without alterations, normal bone survey, positive serology.

The condition is interpreted as a nephrotic syndrome associated with secondary syphilis, whose renal involvement retrograded significantly without specific treatment. Rest, a diet restricted in liquids and salt and the use of diuretics allowed the resorption of the edema and the concomitant use of an antiproteinuric drug such as Enalapril, showed a clear decrease in proteinuria to a range of 900 mg/day, prior to surgery administration of antibiotic treatment with benzathine penicillin (2 400 000 units). In subsequent outpatient controls, complete resolution of both the clinical and humoral symptoms was observed in the first week after specific treatment. VDRL test after three months negative.

DISCUSSION



Once the most striking clinical-humoral elements of this case were analyzed as a whole, such as the presence of skin lesions, severe proteinuria accompanied by hypoproteinemia and hypoalbuminemia, edema with renal characteristics and hyperlipidemia, a nephrotic syndrome was diagnosed. From an etiological point of view, we are inclined to first rule out the most frequent secondary causes in adulthood and think about histopathological forms consistent with the patient's age, which lead to a less favorable evolution and prognosis. .

As could be seen in the presentation, in the opinion of the authors, this case meets all the characteristics required to be considered a nephrotic syndrome associated with secondary syphilis.

The manifestations of secondary syphilis are very varied, generally presenting with skin lesions that can often be confused with a secondary reaction to drugs, pharyngitis, as occurred in our case, low-grade fever, general malaise, loss of weight, lymphadenopathy, etc. ⁽⁴⁾

During secondary lueticism all organs can be affected, however kidney damage is rare. When this kidney condition occurs, it usually manifests itself more frequently as a nephrotic syndrome, as occurred in the case in question, and less frequently due to isolated proteinuria or, more rarely, as acute hematuric glomerulonephritis. ⁽⁵⁾ This nephrotic syndrome is almost always discovered as it occurred, with a sudden onset, without arterial hypertension and with preserved kidney function and can be transient with spontaneous remission or persistent over time.

In the presentation of this patient, it can be seen that both the edema and proteinuria disappeared almost completely before the start of treatment with penicillin, which allows it to be classified as one of the few published cases of spontaneous resolution. Taking into account everything stated up to this point, it can be stated that the patient met all the diagnostic criteria for luetic nephropathy described by, who pointed out the coexistence of secondary syphilis with nephrotic syndrome; strong positivity of serological tests; Spontaneous remission or rapid healing after appropriate treatment and absence of other causes of kidney disease. ⁽⁶⁾

The pathophysiology of kidney disease is similar to that of other immunocomplex glomerulopathies such as poststreptococcal or lupus, where

the elevation of the levels of circulating immune complexes and their disappearance coincide with the clinical resolution of the disease. Nephropathy supports this genesis, in addition to being demonstrated in the cases studied by biopsy. ⁽⁷⁾

As was evident, in this patient, at the time of diagnosis of nephrotic syndrome, he did not have active infection, although it is described within the rare infectious etiologies of this syndrome.

The study does not include a renal biopsy, which is important to specify the type of glomerular condition, which is described in various cases reported in the literature due to the presence of immune complexes, such as poststreptococcal or lupus glomerulonephritis. In a series of more than 4,000 cases of early syphilis, nephrotic syndrome was seen in less than 0,3 % of patients. It has also been described in congenital lues. ⁽⁷⁾

The reversibility of the condition spontaneously or with treatment highlights the importance of considering the diagnosis of syphilis (the great simulator) in patients with recently established nephrotic syndrome, even more so if there is no other obvious cause of it. The nephrotic syndrome associated with syphilis is not addressed to a large extent in the texts of Internal Medicine, Infectology and Nephrology, in addition there are few cases published in the medical literature, especially in recent years, so in the authors' consideration it should be pay attention to this association that, because it is rare, may go unnoticed. ⁽⁸⁾

CONCLUSIONS

Few cases of patients with nephrotic syndrome associated with syphilis have been found in the medical literature. It is important to pay attention to this association, which can go unnoticed and be reversible with treatment. The importance of taking a detailed clinical history and ruling out secondary causes in patients with nephrotic syndrome is highlighted, including serological tests due to the increase in sexually transmitted infections in Cuba.

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STATEMENT OF AUTHORSHIP

BYAM: conceptualization, research, methodology, project administration, validation, writing the original draft, review, editing.

YSR: conceptualization, investigation, methodology, validation, writing of the original draft, review.

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CONFLICTS OF INTEREST

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