



REFRACTORY DEPRESSIVE DISORDER AS THE FIRST MANIFESTATION OF ADOLESCENT SJÖGREN'S SYNDROME, SUCCESSFULLY TREATED WITH RITUXIMAB

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ABSTRACT

Background: The psychiatric manifestations of Sjögren's syndrome are often overlooked despite their prevalence. They can be revelatory of the disease and include anxiety, depression, dementia and, rarely, psychosis.

Case description: We report a case of 18-year-old female in whom a major depressive syndrome revealed primary Sjögren's disease, with a favourable outcome after treatment with rituximab.

Conclusion: The diagnostic of Sjögren's syndrome should be considered in patients who present with unexplained and refractory neuropsychiatric symptoms, even in the absence of sicca symptoms.

KEYWORDS

Primary Sjögren's syndrome, depression, rituximab

LEARNING POINTS

- Psychiatric manifestations secondary to Sjögren's syndrome are not rare but often overlooked.
- They can be indicative of the disease and precede systemic signs by years.
- The diagnostic of Sjögren's syndrome should be considered in patients who present with unexplained and refractory neuropsychiatric symptoms, even in the absence of sicca symptoms.

INTRODUCTION

Psychiatric disorders in Sjögren's syndrome are not uncommon, but often go unrecognised. They are highly variable and usually include anxiety, depression, dementia and, rarely, psychosis^[1]. In some cases, these manifestations can be revelatory of the disease. We report the case of a young patient in whom a major depressive syndrome revealed primary Sjögren's disease, with a favourable outcome after treatment with rituximab.

CASE DESCRIPTION

An 18-year-old patient, without any specific somatic or psychiatric history, no history of medication intake and a family history of autoimmune diseases (maternal rheumatoid arthritis), presented with a depressive syndrome persisting for over 2 years, impacting her quality of life. She reported profound fatigue, constant depressive mood, anhedonia, difficulty concentrating, anorexia with weight loss and hypersomnia, without any other accompanying systemic



signs. The patient received a well-conducted antidepressant treatment for two years along with psychotherapy sessions, with no improvement. The neurological examination was strictly normal, and the cerebral angio-MRI showed no abnormalities. The endocrine assessment did not reveal any anomalies, particularly thyroid and adrenal panels. In the absence of clinical signs, an initial screening immunoassay revealed anti-nuclear antibodies (ANA) positive at 1/320 with a speckled pattern. Complement immunoassay revealed anti-SSA/Ro and anti-SSB/La positive at 200 IU/ml and 40 IU/ml respectively. Anti-double-stranded DNA (anti-dsDNA) and anti-Sm were negative. Erythrocyte sedimentation rate and C-reactive protein were normal. Serum protein electrophoresis (SPEP) showed no abnormalities, and serum C3 and C4 concentrations were within normal limits. An ophthalmological examination revealed a positive Schirmer's test, and minor salivary gland biopsies showed grade 4 lymphocytic sialadenitis from the Chisholm and Mason score. Based on these immunological and histological findings, the diagnosis of primary Sjögren's syndrome with psychiatric manifestations was made according to the 2017 EULAR-ACR classification criteria. The patient did not exhibit clinical or biological signs of associated systemic lupus. Since the depressive syndrome proved refractory to first-line treatment, the patient received rituximab at a dosage of 1,000 mg for one cycle (day 1 and day 15). We observed a notable improvement after one month, with significant amelioration of depressive symptoms, mood stabilisation, and resumption of social and academic activities. This improvement persisted during the two-year follow-up.

DISCUSSION

Sjögren's syndrome is an autoimmune disease characterised by glandular and extra-glandular manifestations. The pathological mechanism of Sjögren's syndrome is unknown; however, central nervous system (CNS) involvement may be immunologically mediated^[1]. The prevalence of CNS involvement in Gougerot-Sjögren's syndrome reported in the literature varied considerably between 2.5 and 60%, which could be explained by the international variability of diagnostic criteria and the non-specificity of symptoms^[2,3]. These neuropsychiatric manifestations vary greatly, including neurological deficits as well as psychiatric disorders, notably behavioural, mood or personality changes, sleep problems, cognitive dysfunction and psychotic symptoms^[3,4]. Depression is quite common in adults with Sjögren's syndrome, with a prevalence estimated in a meta-analysis between 8.33 and 75.56%^[5]. Neuropsychiatric symptoms related to Sjögren's syndrome in children and adolescents vary greatly in reports. Lee et al. reported a case of a 15-year-old patient with depression and involuntary agitation related to Sjögren's syndrome, with a good outcome after treatment with methylprednisolone and rituximab^[6]. Hammett et al. published a case series of four adolescents with psychosis and suicidal ideation who were subsequently diagnosed with Sjögren's syndrome^[7]. One patient was treated with

rituximab, two patients were on methylprednisolone and rituximab, and one patient received methylprednisolone, intravenous immunoglobulins, rituximab, intravenous plasmapheresis and cyclophosphamide, with favourable outcomes observed in all four patients.

The management of neuropsychiatric involvement in Sjögren's syndrome lacks well-established guidelines, relying only on limited data derived from small case series and experiences with other autoimmune diseases^[8]. Early treatment with corticosteroids and immunosuppressive agents could rapidly improve symptoms and prevent complications^[8]. In our patient, psychiatric symptoms improved with rituximab, suggesting that it could be an effective therapeutic option that should be considered for refractory psychiatric disorders associated with primary Sjögren's syndrome. The psychiatric manifestations of Sjögren's syndrome are often overlooked despite their prevalence. They can be revealing and remain isolated for a long time before the onset of other systemic symptoms, highlighting the importance of seeking signs of Sjögren's syndrome in patients experiencing unexplained neuropsychiatric manifestations refractory to psychiatric treatments.

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