



SEROCONVERSION AGAINST HEPATITIS B, WITH HIGH TITERS CONCENTRATION, IN A PEDIATRIC PATIENT WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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BACKGROUND

Systemic Lupus Erythematosus (SLE) is a chronic, multisystem inflammatory disease of an autoimmune nature. Its etiology is related to interactions of genetic, environmental and hormonal factors. Infections, important environmental triggers, are the major cause of morbidity and mortality. Thus, to prevent them, vaccination becomes extremely relevant. In the immunization against hepatitis B, the safety and reliability of the vaccine have been verified, and the titers concentration of seroconversion, in SLE patients, is lower than that observed in healthy patients.

CASE REPORT

Female patient, with a complete immunization scheme, diagnosed, at 8 years of age, with SLE associated with lupus nephritis (Class III + V), submitted to two inductions with Cyclophosphamide and maintenance with Mycophenolate mofetil 2 g / day, in addition to the recommended treatment for SLE. It presented only partial response. After 4 years of disease progression, there was a significant worsening of proteinuria with hematuria (SLEDAI 8). Opted for a new induction with Mycophenolate 3g / day, besides pulse with methylprednisolone and later Prednisone 40 mg / day and Hydroxychloroquine 400 mg / day. During the update of the vaccination profile, the tests revealed non-reactive Anti-Hbs, hypogammaglobulinemia and lymphocyte profile below the 10th percentile for all strains. She was immunized with the anti-Hepatitis B vaccine booster and started using Rituximab for nephritis. Anti-HBs were reagent one month after revaccination, with a concentration greater than 130mIU / mL.

CONCLUSION

In the AYTAC study, 80% of the lupus patients presented seroconversion after administration of three doses of hepatitis B vaccine, but the Anti-HBS titers concentration was lower than that of healthy children. The use of immunosuppressants was pointed out as one of the reasons for this reduced ownership.

In the case under study, seroconversion, after booster vaccination, was higher than 130mIU / mL, despite the patient being immunosuppressed. This immune response, similar to that of healthy patients, is rare in lupus children and appears to contradict the hypothesis that the use of immunosuppressants would reduce Anti-HBS titers. However, unlike the AYTAC study, the patient had received three doses of the hepatitis B vaccine in the first year of life. Thus, the relevant role of memory cells of the immune system, activated by the initial vaccination schedule, is presented as the main hypothesis to explain seroconversion, with high titers concentration, observed in this case.