Optic Neuritis presents a lot of etiologies. However, an efficient therapy for specific causes remains discussed among neurologists. Objective: To present a case of optic neuritis caused by Epstein-Barr Virus and treated with corticosteroid. Case Report: A case of a 16-year-old white girl who sought medical consultation for an acute progressive visual loss in her right eye. She reported pain during ocular movements and fever as her first symptoms, five days before the beginning of vision loss. She was a healthy girl, and didn’t report the presence of any other symptoms such as headache, lymphadenopathy, recent flu-like symptoms, or any other neurological symptom, before the visual picture. Her visual acuity reached 20/100, the right pupillary reflex was slow when compared to the other eye, and the campimetry showed some field defects characteristic of an increase in the blind spot of the right eye. The retinal examination revealed disc swelling of the affected eye, with discrete peri-papillary haemorrhages, suggesting an infectious-inflammatory optic neuritis. The patient was submitted to a brain MRI and to lumbar puncture. The brain MRI was normal, and the cerebrospinal fluid revealed a positive test for EBV IgM, with other tests normal. The serum monostest was positive, and liver enzymes were slightly elevated. This patient received the diagnosis of optic neuritis (NO) caused by EBV virus, and was submitted to therapy with intravenous methylprednisolone 1g a day during three consecutive days. One month later, her visual acuity recovered, reaching 20/25 (80%), but persisted unchanged after 12 months of follow-up. Her peripheral visual defect in the right eye persisted, but didn’t influence her daily activities. Conclusions: This case report aims to show a possible new etiology for acute NO, and to present a case with a good prognosis after corticosteroid therapy.