Cytomegalovirus (CMV) plays an important role in non-immunocompetent patients due to its high seroprevalence and life-long persistence. However, cases of severe CMV infections are also described in the immunocompetent. Here in particular, the gastrointestinal involvement is of major importance. We describe the case of a 29-year-old immunocompetent young man, who presented with a primary CMV infection mainly of the colon with clinical signs of bloody diarrhoea, fever, hepatitis and haemolysis. The diagnosis was established on the basis of a suspicious endoscopic finding with immunohistochemical detection of CMV in the colonic mucosa, a positive CMV viral load in the peripheral blood and an immune system response typical for primary infection. Based on this case and previous publications, we suggest that a colonoscopy and diagnostic procedures for CMV should be considered if the patient presents with gastrointestinal symptoms like (bloody) diarrhoea, fever, and hepatitis. In a severe case, we recommend antiviral therapy due to a high mortality that has been reported for CMV colitis in immunocompetent individuals.