

The survival of children and adolescents with Hodgkin lymphoma has improved dramatically over the last decades, but even young adult long-term survivors are at increased risk of developing multiple cardiovascular late sequelae of previous treatment. We evaluated the presence of modifiable cardiovascular risk factors (hypertension, hyperlipoproteinemia, hyperinsulinemia, obesity) in young adult Hodgkin lymphoma survivors, who were disease-free for a minimum of 10 years after the end of their treatment, and in age- and gender-matched healthy volunteers. We assumed higher prevalence of modifiable cardiovascular risk factors together with earlier development of atherosclerotic changes in this specific population. All survivors and volunteers underwent physical examination, duplex ultrasonography of both common carotid arteries, all participants completed questionnaire on their eating habits and physical activities. We performed biochemical analyses, including lipid profile, fasting glucose and insulin levels, markers of inflammation, endothelial dysfunction and oxidative stress. The HL survivors showed unfavorable lipid profiles, markers of oxidative stress, endothelial dysfunction and inflammation compared to those of healthy controls. We found a higher prevalence of insulin resistance, metabolic syndrome and atherosclerotic changes in HL survivors. In the future, we should perform early identification of individuals most likely to benefit from intervention strategies in regular follow-up with the goal to slow down progression of atherosclerotic changes and decrease the incidence of cardiovascular events.