Popliteal artery aneurysm is defined as an enlargement of the popliteal artery of more than 50\% of the original diameter. In more than 95\% of the cases, arteriosclerosis is the cause. The prevalence of asymptomatic and symptomatic popliteal artery aneurysms is less than 0.5\% of the population but rises in the age group of the 65-80-year-olds up to 1\%. About one-third of all diagnosed popliteal artery aneurysms are asymptomatic incidental findings, whereas the other two-thirds are noticed due to their symptoms (acute or chronic ischaemia, local compression syndrome, rupture). The indication for invasive treatment is considered for asymptomatic popliteal artery aneurysms at a diameter of more than 2 cm. Symptomatic popliteal artery aneurysms are always an indication for treatment, but acute and chronic ischaemia is associated with a high morbidity. Since the middle of the last century surgical techniques have been used in the therapy for popliteal artery aneurysms and represent the gold standard in treatment strategies. Nevertheless, a growing number of reports about endovascular interventions for popliteal artery aneurysms are being published. In this review the state of knowledge about indications, applicability and results of invasive therapies for the treatment of popliteal artery aneurysms are presented.