This case report of a young man with a testicular germ cell-teratoma tumor illustrates the necessity of a multidisciplinary sequential approach to ensure chance of cure. The outcome of patients with advanced germ cell tumor depends on the optimal clinical management. Residual masses are frequent, and their histology can be different than the initial one (i.e., only residual mature teratoma cells or necrosis-fibrosis). Therefore a second surgery on residual masses with curative intent, may be important to optimize the treatment and follow up.