Clinical presentation, treatment and outcome of anaplastic thyroid carcinoma: results of a multicenter study in Germany.

Anaplastic thyroid carcinoma (ATC) is an orphan disease and confers a dismal prognosis. Standard treatment is not established. The aim of this study is to describe clinical characteristics, current treatment regimens and outcome of ATC and to identify clinical prognostic markers and treatment factors associated with improved prognosis. Retrospective cohort study at five German tertiary care centers. Totally 100 ATC patients diagnosed between 2000 and 2015 were included in the analysis. Disease-specific overall survival (OS) was compared with the Kaplan-Meier method and log-rank test; Cox proportional hazard model was used to identify risk factors. The 6-month, 1-year and 5-year disease-specific OS rates were 37, 28 and 5%, respectively. Stage-dependent OS at 6 months was 78, 54 and 18% for stage IVA, B and C, respectively. 29% patients survived >1 year. Multivariate analysis of OS identified age >=70 years, incomplete local resection status and the presence of distant metastasis as significant risk factors associated with shorter survival. Radical surgery (hazard ratio [HR] 2.20, 95% confidence interval (CI) 1.19-4.09, P = 0.012), external beam radiation therapy (EBRT) >=40 Gy (HR = 0.34, 0.15-0.76, P = 0.008) and any kind of chemotherapy (CTX) (HR =...
11.64, 2.42-60.39, P = 0.003) were associated with longer survival in multivariate analyses adjusted for age and tumor stage. A multimodal treatment regimen was significantly associated with a survival benefit (HR = 1.04, 1.01-1.08, P< 0.0001) only in IVC patients. Disease-specific OS is still poor in ATC. Treatment factors associated with improved OS provide a rationale to devise treatment pathways for routine care. Collaborative research structures should be aimed to advance treatment of ATC.