Results: Clinical and pathological features of 41 patients treated in our institution present a retrospective analysis of angiosarcoma patients treated at a single institution. The median age was 60 (16-81). 34.1% cases were located in the soft tissues (ST) of the limbs and neck (HN) and 7.3% in the bone (B). The overall survival (OS) at 5 years was 26% median age was 55.6 (range 21-82); 61% were female; 72% metastatic disease. PFS at 4 months was 31%. The respective median OS and PFS were not-reached and 94 days. The respective 1-, 3- and 5-year DFS rates were 50%, 22% and 15%. Low tumor grade, DFI above 24 months, exclusive LR and well-differentiated liposarcoma were predictive of a longer survival. After a median follow-up of 97 months, 55 patients (19%) developed LR. The tumor sites for the 7 survivors involved B(4), ST(1), HN(1) and V(1). Radiation induced angiosarcoma was suspected in 17.1% patients. Chronic lymphedema was described/highly probable for 19.5% of the patients. Surgery(S) was performed in 82.9% cases, chemotherapy(CT) in 41.5% cases, and radiation therapy(RT) for 9.8% of cases. CT was more likely to be given to younger patients, but did not improve OS. The pathology report was uncertain for 39% cases at first examination. Superficial tumors (B, ST and HN) had a better OS than deep tumors (V,B) but not statistically significant (31%vs15%), Women had a significant better OS compared to men (36%vs16%, \( p = 0.02 \)). OS at 5 years for patients under age 67 was 30%, and 17% for patients above 67 (\( p = 0.07 \).) Tumor grade was assessed for 85.4% cases. Grade 1(G1) was found in 12.2%, G2 in 36.6% and G3 in 36.6% patients. Patients having G3 tumors had a lower OS, but not statistically significant. Relapse occurred at 58.5% of the patients (from 1 to 4 episodes). Of all relapses, 68.3% occurred locally, 7.3% regionally, and 48.8% were distant metastases. The most common metastatic sites were lung (7 cases), bone (4), skin (4) and liver (3).

Conclusions: Angiosarcoma is an aggressive tumor that was often underrecognized, occurring in various sites. Women with history of radiotherapy or lymphedema are at higher risk, but have a better prognosis. Younger patients and lower grade seem to have a longer survival.

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