

Radical Approach to Malignant Tumors of the Heart and the Great Vessels – A Hope for Survival

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Malignant tumors of the heart and great vessels are extremely rare. One-year survival with conventional treatment is less than 10%. The aim of this study is to report our experience with a radical multidisciplinary approach to these highly fatal malignant tumors.

During the past two years we treated six patients (four females) with primary sarcoma of the heart (n=3) and pulmonary artery (n=3). Mean age was 54±10 years. Two patients were in NYHA class IV. Correct preoperative diagnosis was achieved in five of the six patients. Chemotherapy was administered preoperatively (n=3) and or postoperatively (n=4) and focused radiotherapy in one patient. All patients underwent complete resection of the tumor with reconstruction of the excised cardiac chamber or great vessels using bovine pericardial patch, PTFE grafts and human allograft. In two patients, the heart was explanted and re-implanted after ex-vivo removal of the tumor and reconstruction. Thirty-day operative mortality was 0%. In a mid-term follow-up, two patients are alive with no evidence of disease, two are alive with distant metastasis and two expired, one with distant metastases and one due to local recurrence.

These data suggest that radical multidisciplinary approach to primary sarcoma of the heart and great vessels is safe and effective, with recurrence and survival rates that are superior to conventional treatment.