





SIZE NO BAR FOR CHEST WALL PRIMITIVE NEURO ECTODERMAL TUMOURS (CW PNET): GOOD OUTCOMES WITH MULTIMODALITY TREATMENT

Dr. Virendra Kumar Tiwari; Dr. Sabita Jiwnani; Dr Devayani Niyogi; Dr Karthik V; Dr C S Pramesh

Tata Memorial Hospital, Mumbai, India

Objective and method- Giant chest wall PNETs are considered to have poor prognosis. However, results of non-surgical treatment are poor. We conducted a retrospective analysis of a prospective database of CW PNETs. Patients receiving multimodality treatment including surgery between January 2011 and December 2022 were included for analysis. Outcomes have been calculated from surgery date to event/ lost to follow up.

Result- Seventy patients were operated, median age being 23 years. All patients had histological confirmation of PNET. According to pretreatment radiology (available in 47 patients), median tumour volume was 417.4cc. All but one received 6 to 9 weeks of induction chemotherapy. Out of 70, 65(93%) needed rib resection, 7(10%) required sternal resection, 22(31%) and 12(17%) required lung and diaphragm resection respectively, one needed hepatectomy. Reconstruction was with rigid (bone cement-mesh sandwich/titanium) in 26(37%), prolene mesh in 28(40%). Nine of 70(12%) had close/positive margins on final histopathology. Fifty-one patients(73%) received postoperative radiation. Forty-nine of 70 patient (70%) completed their planned therapy. At a median follow up of 52 months, 5-year overall survival was 57.8% and disease-free survival was 53.6%. Three patients had treatment related death, two due to surgery related complications and one during postoperative chemotherapy.

Conclusion- Tumours larger than 8cm and volume greater than 200cc are considered poor prognostic factors for CW PNETs. In this analysis, the median tumour volume was double this size. Despite this, with appropriate systemic therapy and radical surgery, we achieved a reasonable overall and disease-free survival in these patients.