

Palliative Forequarter Amputation; Indication, Technique And Outcome

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INTRODUCTION:

Forequarter amputation (interscapulothoracic amputation) is regarded as one of the most debilitating surgical procedure in modern times. In Malaysian setting, where patients do present late for medical treatment, its role is significant in selected cases especially in the palliative setting. We review indication, technique and outcome of palliative forequarter amputation in Penang General Hospital.

METHODS:

A retrospective review of all cases that underwent forequarter amputation from January 2016 to December 2017 were reviewed. There were 4 cases of forequarter amputation during the period. All the amputations were done for palliative reason. We use the 'racquet' incision and secure the anterior neurovascular bundle 1st before completing the posterior resection via scapulothoracic joint. 1 patient had a long lateral arm flap as his tumour involved the chest wall.

RESULTS:

Mean age for our cases is 40 (16-56) years old. 3 patients died at with a mean survival of 3 months. The forth patient is still alive at 2 months post forequarter amputation. At 2 weeks, all the patients had significant improvement in pain and quality of life post amputation.

DISCUSSIONS:

Limb salvage surgery has replaced the role of amputation since the advent of neoadjuvant chemotherapy and radiotherapy in the management of shoulder girdle malignancies¹. However, in certain condition, amputation is still required to provided oncological margin be it for curative or palliative reason. An anterior first approach gives good and early control of the neurovascular bundle making surgery fast and possibly minimize bleeding.

Table 1 showing demographic data of cases underwent forequarter amputation.

age	diagnosis	indication	Survival (months)
36	Left proximal humerus spindle cell sarcoma	Extensive tumour encasing brachial plexus	3
51	Recurrent MPNST right axilla	Fungating mass post radiotherapy	1
56	Metastatic NPC to right proximal humerus	Extensive lesion with pathological fracture and brachial plexus involvement	5
16	Right proximal humerus osteosarcoma	Fungation with bleeding	Still alive at 2 months

CONCLUSION:

Despite being a debilitating surgery, palliative forequarter amputation provides quality of life in selected cases.

REFERENCES:

1. Merimsky, O., Kollender, Y., Inbar, M., Lev-Chelouche, D., Gutman, M., Issakov, J., Mazeh, D., Shabat, S., Bickels, J. and Meller, I., 2001. Is forequarter amputation justified for palliation of intractable cancer symptoms?. *Oncology*, 60(1), pp.55-59.