

## Early Result In Managing Skeletal Metastasis In Budding Orthopaedic Oncology Center In Malaysia.

<sup>1</sup>Tan CS, <sup>1</sup>Narhari P, <sup>1</sup>Aziz A, <sup>1</sup>Osman Z

<sup>1</sup>Department of Orthopedic, Hospital Pulau Pinang, Jalan Resideni, 10990 George Town, Pulau Pinang

### INTRODUCTION:

Skeletal metastasis is the commonest bone malignancy in patient aged 40 and above<sup>1</sup>. Appendicular skeletal metastasis is less common than axial metastasis. We review cases of appendicular skeletal metastasis at our institution.

### METHODS:

17 patients with appendicular skeletal metastasis from January 2016 till January 2017 were reviewed at our institution. Patient data was trace from oncology registry to evaluate survival rate and complications. Kaplan Meier curve was used to review patient's survival.

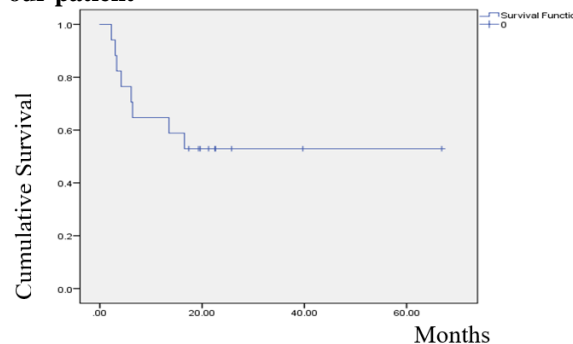
### RESULTS:

Out of 17 patients, 5 were female and 12 were male. 47.1% (n=8) of the patients had visceral metastasis and 52.9% (n=9) had spine metastasis upon referral. 4 of the patients had isolated bone metastasis. Primary site and metastasis are shown in table 1. 58.8% (n=10) of the patient underwent surgery due to pathological fracture to appendicular skeleton. 75% of our patient survive more than 6 months since the date of orthopedic referral (Diagram 1).

**Table 1: Demographic data of our patient**

Factor	%	Number
Primary site		
• Lungs	35.3	6
• Thyroid	17.6	3
• Prostate	17.6	3
• Breast	17.6	3
• Nasopharyngeal	5.9	1
• Pancreas	5.9	1
Metastasis ( Bone scan)		
• Single	23.5	4
• Multiple	76.5	13

**Diagram 1: Kaplan Meier Curve of survival among our patient**



### DISCUSSIONS:

Aims of managing appendicular skeletal metastasis is to reduce pain, improve mobility and improve quality of life<sup>2</sup>. Skeletal metastasis presenting with pathological fracture should be threated operatively follow by radiotherapy whenever possible<sup>3</sup>. In selected cases where survival is predicted to be less than 3 months, conservative treatment is preferred. Due to small number of sample size, we were not able to correlate independent factors associated with surgical intervention.

### CONCLUSION:

Patient with appendicular skeletal metastasis benefits from surgery regardless the intents of treatment being palliative nor curative.

### REFERENCES:

1. Vivek, Amber H, Alla A. et. al. Incidence and outcome of bone metastatic disease at University Malaya Medical Centre. Singapore Med J 2014; 55(10): 539-546
2. Hafilah et. al. Outcome of Skeletal Reconstructive Surgery for Metastatic Bone Tumours in the Femur. Malaysia Orthopedic Journal. 2017 Mar; 11(1): 28-34.
3. Nakashima H, Katagiri H, Takahashi M, Sugiura H. Survival and ambulatory function after endoprosthetic replacement for metastatic