

IS DVT PROPHYLAXIS NECESSARY AFTER ONCOLOGY LOWER LIMB SURGERY?

M.Y. Lim¹, Vivek Ajit Singh¹, Anushya Vijayanathan²

¹ Department of Orthopaedic Surgery, University of Malaya, 50603 Kuala Lumpur, Malaysia.

² Department of Biomedical Imaging, University of Malaya, 50603 Kuala Lumpur, Malaysia.

INTRODUCTION:

Deep vein thrombosis (DVT) has been independently associated with both malignant disease and orthopaedic surgery. Patient with neoplasm who underwent orthopedic surgery may therefore be at high risk for thromboembolic events. However less emphasis is given to this group of patients compare with patient underwent total hip or knee replacement. The objective of this study was to determine the incidence of DVT and the risk factors in patients underwent oncology lower limb surgery without prophylaxis.

METHODS:

Thirty eight patients who underwent lower limb surgeries for oncology indication were included in the study. There were 24 men and 14 women with a mean age of 36 years (11-75). Potential risk factors were identified and documented. All patients were not given any form of prophylaxis (mechanical and chemical) before and after operation. DVT surveillance was performed one day before operation and two weeks after operation with ultrasound Doppler. Patients with DVT were subsequently scheduled for CTPA to detect pulmonary embolism (PE).

RESULTS:

DVT was detected in 2 patients (5%). All patients were asymptomatic and were proximal thrombosis. One patient (2.6%) was diagnosed with non-fatal PE and was asymptomatic. PE was detected incidentally by staging computed tomography scan and the patient was negative for DVT by ultrasound Doppler.

DISCUSSIONS:

Without the use of prophylaxis, the rate of DVT in our study was lower than other studies (5%). Although our PE rate was higher than other

Table 1 showing results of other studies

Author	Study sample	DVT	PE
Lin et al ¹	Malignant musculoskeletal tumor	14.2%	0.6%
Nathan et al ²	Malignant musculoskeletal tumor	4%	1.1%
Tuy et al ³	Malignant musculoskeletal tumor	21%	2%
Yamaguchi et al ⁴	Benign and malignant musculoskeletal tumor	22%	1%
This study	Benign and malignant musculoskeletal tumor	5%	2.6%

studies which was 2.6%, this does not represent our true result as only one patient was positive for PE in our small cohort.

CONCLUSION:

The incidence of DVT as detected by Doppler ultrasound in patients undergoing oncology lower limb surgery was low even without prophylaxis in our center. Hence, routine DVT prophylaxis in this group of patients may not be necessary.

REFERENCES:

1. Lin PP. et al . J Surg Oncol 1998; 68(1), 41-47.
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4. Yamaguchi et al. Bone Joint J 2013; 95-B(9), 1280-1284.