Reciprocal collaboration towards prevention of Venous Thromboembolism (VTE) in surgical patients in United Christian Hospital

CHAN HC (2) CHU KL (1) , POON W (2)
(1) Department of Ana & PM, UCH  (2) Nursing Services Division, UCH/KEC

Keywords:
Surgical patients
Venous Thromboembolism (VTE)
Assessment & prophylaxis
Multidisciplinary approach

Introduction
Venous Thromboembolism (VTE) has long been considered a medical problem that affects predominately Caucasians (in the US the incidence is 80 cases per 100,0001). Limited studies have also demonstrated the incidence rate of VTE in Asian, particularly in Chinese patients. Even though the data is underreported, VTE is still a life-threatening complication that can happen after a major surgery. Therefore, it is very important that all surgical team members be acutely aware of this situation. In United Christian Hospital (UCH), surgical care professionals from different specialties have adopted mechanical prophylactic devices that adhere to their own departmental guidelines. There is different practice on the VTE risk assessment, continuity care of peri-operative mechanical thromboprophylaxis, utilization of SCD and clinical pathways in UCH. This not only creates confusion in the practice amongst surgical care professionals in various specialties, but also deviates from the benchmark for the prevention of VTE.

Objectives
☐ To make an alignment with revised practices of VTE assessment & prophylaxis at the hospital  ☐ To reinforce a standardized practice for continuity care of post-operative VTE mechanical prophylaxis  ☐ To reinforce clinical pathways for patient care & utilization of mechanical devices

Methodology
By project management  Initiating  ☐ Started the project in March 2014  ☐ Identified the practice gaps in prevention of VTE used by various departments & surgical teams  ☐ Identified inadequate stock of sequential compression devices in hospital that varied with benchmarks in other hospitals  Planning  ☐ Established a working group to draft a standardized practice for the prevention of VTE in surgical patients. The working group members included medical and nursing representatives of different specialties  ☐ Verified the local and hospital incidence of VTE and application of VTE risk assessment scale compared with international & regional data
and found significantly varied results. □ Benchmarked the existing practices adopted by other local hospitals for prevention of VTE □ Planned an estimated budget on mechanical prophylaxis for approval by the Hospital Management.

Executing □ Conducted literature review on different guidelines including ACCP 2012 guideline2 & NICE 2010 guideline3 in the prevention of VTE. □ Held consecutive meetings for the standardized practice including adopting the Autar VTE risk assessment scale, continuity care of peri-operative mechanical thromboprophylaxis, clinical pathways for patient care, and mechanical devices’ utilization by reaching a mutual agreement amongst workgroup members □ Fine-tuned the standardized guidelines with evidence-based support □ Phase I of the project in various kinds of high risk operation in subspecialties including Colorectal, Urology, Gynecological & Orthopedics & Traumatology teams was executed on July 2015 □ Phase II will be planned for other high risk patients undergoing surgery on March 2016.

Monitoring/controlling- □ Justified the clinical pathways for patient care and utilization of mechanical devices within the limited resources available during the implementation of various phases. □ Established the standard guideline in line with the hospital governance.

**Result**

I. A hospital based standard guideline for the prevention of VTE in surgical patients was adopted. II. The compliance audit on standard guidelines is work in progress and will be followed up on in due course. III. The additional quantity of Sequential Compression Devices was purchased The incidence of VTE might be minimized if surgical team members adhere to VTE prevention protocol.