Decreasing the incidence of deep vein thrombosis through the use of prophylaxis

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Introduction
Neurosurgery patients are at moderate to high risk of venous thromboembolic events postoperatively. Many researches on prevention and treatment of deep vein thrombosis (DVT) indicates that this problem could be prevented with a thorough assessment and utilizing appropriate prophylaxis. Through conducted a literature review; to implement an effective evidence-based practice, with the hope that this would reduce the incidence of DVT in Neurosurgical department at PMH, while at the same time minimizing the adverse outcome.

Objectives
(1)Increase the awareness of DVT. (2)Identify and treat patients at risk. In order to reduce the incidence of DVT.

Methodology
The quality improvement team undertook this program between June 2011 and January 2012 with a view to designing interventions to improve the use of prophylaxis and reduce the rate of DVT. The interventions initially centered upon highlighting the burden of DVT, nurses knowledge on DVT and risk assessment tool, the extent of failure to apply guideline evidence into practice. Later interventions sought to refine and implement a standardized DVT prophylaxis protocol and enhanced feedback on DVT to clinical teams.

Result
Total 714 patients were included in this program. Approximate 80% of candidates have no or low risk of DVT. Three incidents of DVT were identified in those were in moderate to high risk of DVT. The result is consistent with the literature review being done. There were an increase in the use of risk assessment and prophylaxis for DVT in ward setting (70% to 100%) during the program. The nurse's knowledge of DVT and the prophylactic regimen is enhanced. The nurse's knowledge of DVT and the prophylactic regimen is important and is associated with reductions in this potentially life-threatening complication and can lead to improved patient outcome. Thoughtful, evidence-based protocols; multidisciplinary collaboration; and comprehensive educational efforts are required to achieve an optimal DVT prophylaxis in complex
hospital setting.