Shorter Length of Stay with Management Program of Deep Vein Thrombosis of Lower Limb in Accident and Emergency Department
Chan KM, Lui CT, Fung HT, Tang YH
Accident and Emergency Department, Tuen Mun Hospital

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Introduction
Ambulatory care of patients with lower limb deep vein thrombosis (DVT) and low risk of pulmonary embolism had been advocated worldwide, with supporting literatures and guidelines. The novel oral anti-coagulant, rivaroxaban, had been approved for treatment of lower limb DVT without bridging with heparin. This allows more patients benefited from early discharge and ambulatory treatment.

Objectives
To achieve a fast-track risk stratification and diagnostic pathway of lower limb DVT in the Emergency Medicine Ward (EMW) followed with appropriate anticoagulation and advocate early ambulatory care and early discharge.

Methodology
A comprehensive service enhancement program had been launched in July 2015 with departmental guideline, promulgations and clinical audit. Patients presented to the Accident & Emergency Department with suspected lower limb DVT would be managed in the EMW after risk stratification by point-of-care ultrasound and Wells score. Confirmatory ultrasound by radiologists would be arranged if indicated. Anticoagulation, either with heparin and warfarin or rivaroxaban alone (as a self-financed item) is initiated if the diagnosis is confirmed. Early discharge criteria were developed to select patients who are suitable for early ambulatory care: patients with no signs of pulmonary embolism, low bleeding risk, no iliac thrombosis and expected good compliance of follow-up. Patients treated with rivaroxaban would be discharged early and require less frequent ward follow up appointments as drug titration and clotting profile monitoring are not required.

Result
Six patients had been managed since the initiation of the project in July 2015 till December 2015. Half received rivaroxaban while another half received heparin and warfarin. The median length of hospital stay (LOS) was 3.5 days, which was significantly reduced compared with the median LOS of 7 days from the historical data.
of patients managed in the medical ward from 1/12/2012 to 30/11/2014 with the inclusion criteria same as the criteria of cases selected to be managed in the EMW in this project. All cases had uneventful recovery. Hence, early ambulatory care for patients with low risk lower limb DVT is safe and could reduce duration of hospital stay.