

Binational survey of VTE prophylaxis of burns centres in Australia and New Zealand



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Objectives

Unfractionated heparin has been the mainstay of chemoprophylaxis, however enoxaparin has increasingly been used in high-risk surgical patients. In this survey study we investigated current venous thromboembolism (VTE) chemoprophylaxis in major burns centres across Australia and New Zealand.

Method

Phone survey was conducted with burns wards staff at 10 sites registered with the Australia and New Zealand Burns Association (ANZBA). Information was gathered about each site's current VTE prophylaxis protocol, past practices and any plans for future changes. Attempts were made to obtain further information about VTE rates at each unit, however due to discrepancies in VTE reporting, this data was not included.

Results

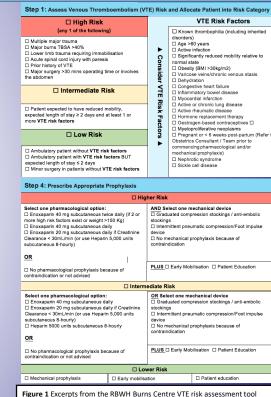
Enoxaparin 40 mg subcutaneously once a day was used as VTE chemoprophylaxis in the Royal Darwin Hospital, North Shore Hospital, Alfred Hospital, Royal Adelaide Hospital, Royal Hobart Hospital, Fiona Stanley Hospital, Middlemore Hospital and Christchurch Hospital. Royal Brisbane and Women's Hospital and Concord Hospital used unfractionated heparin 5000 units twice a day.

Discussion

Currently there is a paucity of data available in the Burns Registry of Australia and New Zealand regarding rates of VTE. Burns patients have a unique risk profile for VTE complications including increasing total body surface area percentage, increased length of stay in intensive care, central venous access and burn wound infection (Wahl & Brandt 2001; Wibbenmeyer et al. 2006). This retrospective survey study shows the lack established protocol for VTE prophylaxis over ANZBA sites. Thus, it would be necessary for a binational protocol in these high-risk patients, which could be facilitated by expansion of the current BRANZ database.

Reflecting on the high incidence of VTE rates in burns patients compared to other surgical units, we found it necessary to evaluate current prescribing practices and initiate a novel VTE risk assessment tool. Figure 1 shows excerpts from the working draft of this tool. We would aim to validate this tool with a prospective study to evaluate clinical efficacy.

Unit	DVT/PE Rate (%)	Year	Surgery (total) VTE/PE rate (%)	Burns VTE/PE rate (%)
Surgery (Total)	0.70		VIL/FL Tate (%)	Tate (70)
Ophthalmology	0.05	2012	0.73	3.95
Burns	2.46	2013	0.58	2.12
Neurosurgery	3.03	2014	0.69	2.01
Orthopaedics	6.25	2015	0.76	2.45
(trauma)		2016	0.74	0.91



Wibbenmeyer, L., Danks, R., Faucher, L., Amelon, M., Latenser, B., Kealey, G.P. and Herwaldt, L.A., 2006. Prospective analysis of nosocomial infection rates, antibiotic use,

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Wahl, W.L. and Brandt, M.M., 2001. Potential risk factors for deep venous thrombosis

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