

# **The use of the geko™ device (a neuromuscular electrostimulation device) and the resulting activation of the foot and calf muscle pumps for the prevention of venous thromboembolism in patients with acute stroke**

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## **Abstract**

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### **Introduction**

The University Hospital of North Midlands NHS Trust has recently introduced the geko™ device as an alternative mechanical VTE prophylactic device for high risk acute stroke patients who are contraindicated to, or do not tolerate intermittent pneumatic compression (IPC). The introduction of the geko™ device into local clinical practice has been managed via a clinical audit where the aim of this audit was to assess the effectiveness of this prevention strategy. The audit will cover a 12 month period which will end in October 2017. The clinical audit is expected to involve between 800-1000 acute stroke patients.

Recently, the audit data collected between November 2016 and May 2017 has been reported and submitted as an abstract to relevant and forthcoming Stroke conferences. Patients with either ischaemic or haemorrhagic stroke were included in this audit. Data so far reported includes a summary of symptomatic VTE at 90 days' post discharge, how many patients were prescribed either IPC or the geko™ device, alongside the duration of patient use and patient tolerance of each of these devices.

This audit continues and will eventually include 180 days of patient follow up and will measure any resulting DVT and PE incidence in those patients prescribed either IPC or the geko™ device.

### **Interim position**

The interim abstract highlights that the majority of high risk immobile acute stroke patients who could not tolerate IPC managed to tolerate the geko™ device. These patients would have not been treated as effectively otherwise with the potential that the geko™ device will reduce the risk of morbidity and mortality in stroke patients.

### **Further correspondence**

For further information the team at The University Hospital of North Midlands NHS Trust are kindly willing to communicate with any fellow stroke physicians who may have an interest in this audit. In the first instance this will be done via e-mail and this can be arranged on a case by case basis via your local Firstkind sales representative.