

## **Thromboembolism Prophylaxis after Cesarean Section**

Naeema A. Mahmood, MD, MBBS\* Khalid M. Sharif, MRCP, MD\*\*

**Background:** Cesarean section (CS) increases the risk of venous thromboembolism (VTE). Therefore, thromboprophylaxis is recommended for women undergoing CS.

**Objective:** To evaluate the thromboembolic risk for patients delivered by CS and to evaluate the current thromboprophylaxis following CS.

**Design:** A Retrospective, Cross-Sectional Study.

**Setting:** Salmaniya Medical Complex, Bahrain.

**Method:** Five hundred fifty-eight CS were performed from 1 May 2011 to 31 October 2011. The following risk factors for VTE were documented: age, weight, parity, the number of fetuses and whether elective or emergency CS, extended surgery, postpartum hemorrhage, the presence of preeclampsia and sickle cell disease. Thromboprophylaxis used, dose and duration were also recorded. All data were analyzed using SPSS statistical package versions 23. Descriptive statistics were used to report the data.

**Result:** Five hundred fifty-eight CS were performed from 1 May 2011 to 31 October 2011. Three hundred seventeen (56.8%) participants were Bahraini. The mean maternal age was 32 years, and the mean parity was 2.2. Emergency CS was performed in 345 (61.8%) participants and 213 (38.2%) women had elective CS. Five hundred ten (91.4%) women have had at least one risk factor for thrombosis. One hundred eighty-four (33%) were 35 years and older, 164 (29.3%) were multiparous, and 46 (8.2%) had multiple gestations. One hundred thirty-nine (24.9%) were obese. Other risk factors were extended surgery, 8 (1.4%), CS hysterectomy, 2 (0.4%), postpartum hemorrhage, 19 (3.4%), sickle cell disease, 9 (1.6%) and preeclampsia, 21 (3.8%). An anticoagulant was prescribed for 139 (24.9%) participants. Low molecular weight heparin (LMWH) was the most commonly prescribed anticoagulant 125 (22.4%), followed by unfractionated Heparin UFH 7 (1.3%). Thromboprophylaxis was administered for three days in 89 (15.9%) and 63 (41.4%) received it for five days.

**Conclusion:** Approximately two-thirds of the patients received inadequate thromboprophylaxis. There is an urgent need for proper administration of thromboprophylaxis following CS to reduce maternal morbidity and mortality.