ORIGINAL RESEARCH PAPER

Gynaecology

INCIDENCE OF THROMBOEMBOLIC DISEASE IN THE POSTPARTUM PERIOD IN 6 MONTHS IN GOVERNMENT RSRM HOSPITAL

KEY WORDS:

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ABSTRACT

The aim of the study is to find out the incidence of thromboembolic disease in the postpartum period in the last 6 months in Government RSRM hospital and its management and outcome. This is a Retrospective study involving women admitted in Government RSRM Lying in hospital who developed thromboembolic events between May 2017 and October 2017. Among the deliveries which occurred between May and October 2017, 11 women developed thromboembolic complications. These women were compared according to age group, BMI, Mode of delivery, Risk factors, postnatal period in which they developed complication, Associated infections, parity. Management and outcome of these patients are explained in detail.

INTRODUCTION

Pregnancy-related venous thromboembolism (VTE) is a major cause of maternal morbidity and mortality. Normal pregnancy is associated with a manifest shift of the coagulation and fibrinolytic systems towards hypercoagulability. Although these changes are of physiological importance in minimizing the risk of blood loss during delivery, they also increase the risk of thromboembolism. Some major predisposing factors are increasing maternal age, operative delivery, immobilization, obesity, heart disease, malignancy, Caucasian descent, a history of thrombosis, thrombophilia, and familial thrombosis.

The incidence of VTE is reported to be about 13/10,000 pregnancies, about half occurring before delivery and the other half in the puerperal period. Thus, during a six-week span, the risk of VTE increases roughly 5-fold as compared to the antepartum period. In addition, it has been shown that the puerperal risk of thromboembolism is highest in the immediate postpartum period. Furthermore, preeclampsia and caesarean section only have an impact on thrombosis risk during the puerperal period. Targeted thromboprophylaxis can prevent postpartum venous thromboembolism with minimum harm.

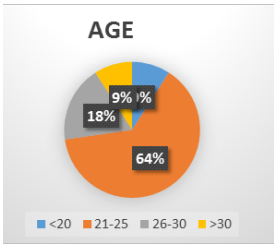
METHODS

Retrospective method of study conducted in Government RSRM hospital. Complete haemogram, D-dimer test, venous Doppler, chest x-ray , CT pulmonary angiogram were used for diagnosis.

RESULTS

A total of eleven patients were diagnosed with thromboembolic disease in the postpartum period. 8 cases of DVT, 2cases of CVT and a case of pulmonary embolism were diagnosed.

AGE DISTRIBUTION



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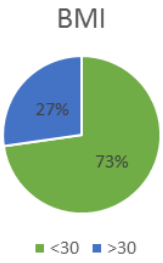

POSTNATAL PERIOD

<3 WEEKS: 9
>3 WEEKS: 2

MODE OF DELIVERY

- LSCS - 8
- Vaginal delivery- 3

POSTPARTUM INFECTION

- Fever-2
- Mastitis-1
- Wound gaping-2
- UTI -2

PARITY

1 -2
2 -3
3 -4
4 -2

OTHER RISK FACTORS

Gestational hypertension/Preeclampsia - 6
Postpartum Hemorrhage - 2
Anemia – 5
Dehydration-7

MANAGEMENT

Early mobilization, adequate hydration, calf exercises, graduated stockings were the conservative methods used. Unfractionated heparin or Low molecular weight heparin were used for the treatment. It was continued until 6weeks postpartum.

OUTCOME

All patients recovered well with the above management. Early diagnosis, appropriate investigations and prompt treatment were the key in achieving optimal outcome.

DISCUSSION

Among the 11 patients, 64% were in the age group of 21-25 years. Within 3 weeks of postnatal period, around 81% of patients were affected. Pomp et al reported a fivefold increased risk during pregnancy and a 60-fold increased risk during the first 3 months after delivery compared with nonpregnant women.

Around 72% of patients had operative delivery. Venous thromboembolism is more common in women with parity of 3 or more. Caesarean section and prolonged immobilization due to any reason may increase the risk of DVT. Preeclampsia is an independent risk factor. Postpartum hemorrhage significantly increases the risk of venous thromboembolism.

CONCLUSION

Incidence of venous thromboembolism in pregnancy varies between 0.025 and 0.1%. Around 85% of these are DVT and majority of these occur in antenatal period. The rate of venous thromboembolism is greatest in the puerperal period than during

antenatal period. In more than 80% of patients left side was commonly affected and ileofemoral veins were affected in more than half of the patients. After initial clinical evaluation, appropriate diagnostic tests are necessary. Compression duplex ultrasound is diagnostic test for DVT. For diagnosis of pulmonary embolism CT pulmonary angiography is used. A combination of clinical and ECG evaluation along with duplex scan are diagnostic requirements of DVT. Heparin is the drug of choice for thromboprophylaxis. Anticoagulation are to be continued for at least 6 weeks postpartum. Adequate hydration, early mobilization is to be emphasized to patients. A high index of suspicion, thorough assessment and proper anticoagulation, the morbidity and mortality due to venous thrombo embolism in pregnancy can be reduced.

REFERENCES

1. Drife J. Thromboembolism. Br Med Bull. 2003; 67:177–90. [PubMed]
2. Drife J. 2004. Why mothers die, 2000 to 2002 report. Confidential enquiries into maternal deaths [online]. Accessed on June 10, 2008. URL: http://www.cemach.org.uk/Publications/Saving-Mothers-Lives-Report-2000–2002.aspx
3. Friederich PW, Sanson BJ, Simioni P, et al. Frequency of pregnancy-related venous thromboembolism in anticoagulant factor-deficient women: implications for prophylaxis. Ann Intern Med. 1996;125:955–60. [PubMed]
4. Kahn SR, Hirsch A, Shrier I. Effect of postthrombotic syndrome on health-related quality of life after deep venous thrombosis. Arch Intern Med. 2002;162:1144–8. [PubMed]
5. Lindqvist P, Dahlbäck B, Marsál K. Thrombotic risk during pregnancy: a population study. Obstet Gynecol. 1999;94:595–9. [PubMed]
6. Lindqvist PG, Dahlbäck B. Bleeding complications associated with low molecular weight heparin prophylaxis during pregnancy. Thromb Haemost. 2000;84:140–1. [PubMed]
7. Lindqvist PG, Hellgren M, Nord E, et al. Thrombosis prophylaxis decisions in pregnancy – simpler with risk scores. Läkartidningen. 2006;103:1429–32. [PubMed]
8. Lindqvist PG, Kublikas M, Dahlbäck B. Individual risk assessment of thrombosis in pregnancy. Acta Obstet Gynecol Scand. 2002a;81:412–16. [PubMed]
9. Lindqvist PG, Olofsson P, Dahlbäck B. Use of selective factor V Leiden screening in pregnancy to identify candidates for anticoagulants. Obstet Gynecol. 2002b;100:332–6. [PubMed]
10. Lindqvist PG, Svensson PJ, Marsál K, et al. Activated protein C resistance (FV:Q506) and pregnancy. Thromb Haemost. 1999;81:532–7. [PubMed]
11. Salonen Ros H, Lichtenstein P, Bellocco R, et al. Increased risks of circulatory diseases in late pregnancy and puerperium. Epidemiology. 2001;12:456–60. [PubMed]