Thromboembolism Concern With Hormonal Contraceptive Use

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Thromboembolism Concern With Hormonal Contraceptive Use
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INTRODUCTION

Women of childbearing age that are prescribed hormonal contraceptives (HC) are at an increased risk for thromboembolism (DVT, PE, cerebral venous thrombosis) due to estrogen increasing the blood’s ability to clot. (Keenan et al., 2018)

**Thromboembolism estimations:** (Keenan et al., 2018)
- 100 million women across the world use HC
- Comorbidities increasing the risk of thromboembolism: genetic disorders, obesity, smoking, prolonged inactivity
- In the US, it is projected 300-400 healthy women using HC will die from thrombosis complications each year

**PICOT QUESTION**

(P) In women of childbearing age prescribed hormonal contraceptives, (I) how does physician management of contraceptives, (C) compared to women who don’t receive medication management from physicians affect (O) hospitalization rates of women suffering from thromboembolism complications due to the side effects of birth control?

FIGURE 1

**METHODS**

- **Databases:** CINAHL, Nursing Reference Center Plus
- **Keywords:** “thromboembolism”, “hormonal contraceptives”, “women” and “management”
- **Inclusion criteria:**
  - Peer-reviewed articles dated from 2017-present
- **Exclusion criteria:**
  - Articles published before 2017
  - Articles not containing keywords
- **Results of search:** 10 articles relevant to purpose

FIGURE 2

**RESULTS**

**Incidence & Risk Factors:**
- Incidence of venous thromboembolism (VTE) is six times higher in combined oral contraceptive (COC) users compared to progestin oral contraceptive users (POC) (Kurvits, et al., 2021).
- Women who are thirty-five years old and above, smokers, and those with high BMIs. (Geampana, 2019).
- The first year of taking hormonal contraceptives (HC) carries the greatest risk (Keenan, et al., 2018).

**Physician Medication Management:**
- Out of 587,559 women, 1,334 VTE cases occurred during the follow-up period that took place about two years after starting HC (Heikinheimo, et al., 2022).
- Early assessment of contraceptive needs and menstrual bleeding symptoms are needed after diagnosis of hormone-related VTE in adolescent females (Maher et. al., 2022).

FIGURE 3

**CONCLUSIONS**

The research highlights several recommendations for women on hormonal contraceptives in order to reduce the hospitalizations rates of women due to side effects of hormonal contraceptives, including:
- Regular assessments
- Detailed medical history
  - Miscutious history-taking and clinical examination are important components of contraceptive counseling that enable the identification of potential thrombolytic risk factors
- Analysis of risks
- Regular follow-up appointments

These risks and severity of these conditions should be taken into account when deciding on the optimal short-term, i.e. within weeks or months after the diagnosis of VTE, and long-term management of hormonal contraception (Klok & Barco, 2019).

REFERENCES


Figure 2: Explains the more risk factors a person has, the higher chance they will develop a thromboembolism. [https://www.ncbi.nlm.nih.gov/books/NBK59365/](https://www.ncbi.nlm.nih.gov/books/NBK59365/)