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Case Report on Postpartum Venous Thromboembolism (VTE).

Mohammed Sadiq Azam[1], Akhil Kumar Bavu[2], Akhil Aakunuri[2], Saikrishna Mandala[3], Junaid Ahmed[3].

[1]*Department of Cardiology, Krishna Institute of Medical Sciences, Hyderabad, India.*
[2]*Department of Clinical Research, Krishna Institute of Medical Sciences, Minister Road, Secunderabad - 500003, Telangana, India.*
[3] *Pharm-D, Bharat Institute of Technology, JNTU, Hyderabad, India.*

Abstract:
Venous thromboembolism is an uncommon but spectacular occurrence which is the most serious cause during pregnancy and postpartum maternal death and morbidity. Compared to a pregnant incidence, the risk of venous thromboembolism is particularly significant during the postpartum period (up to 6 weeks following birth) (1). Symptoms that signal pulmonary embolism must be closely examined, failure to analyse symptoms is a consistent result in maternal fatalities (2). A 21-year-old woman who has recently born a boy ten days before being admitted to an Indian hospital of tertiary care and has been presented to the department of cardiology with major complaints of chest pain, shortness of breath, pedal oedema, and who was not able to walk the last 3 days. All the essential investigations were proposed and diagnosed with venous thromboembolism in postpartum diseases.

Key Word: *Venous Thrombolism; Postpartum; Pedal oedema.*

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I. Introduction:

During the pregnancy and after-stage periods, women were first diagnosed with venous thromboembolism (such as deep vein thromboembolism and pulmonary embolism). The absolute rate of VTE, a very rare and serious maternal event, is 1 to 2 peer 1000 maternity, is a leading cause of maternal death, and is a significant cause of post-thrombotic morbidity (3).

Because of its higher fatality rate (~30%) in non-pregnant women, aggressive PE was based in thrombolytic arterial thrombosis, percutaneous thrombectomy or operative thromectomy, which was based on the acute abolition of thrombotic clots.

A week has shown that thrombolysis can reduce deaths, and thus current guidelines for both pregnant and non-pregnant thrombolies or catheter-based thrombectomy and surgical thrombectomy recommended if these procedures failed and the risk of bleeding is high. There has been some evidence for thrombolysis.

The use of extracorporeal oxygenation (ECMO) non-thhrombolytic membrane can also be a new way to treat individuals at high risk (2). Hence, we advise in this case report that in case of pulmonary embolism and deep vein thrombosis complaints, careful research should be carried out in pregnant and postpartum ladies.

II. Case Presentation:

Here is a case study of a 20-year-old female patient who had lately (after 10 days) been delivered to the Tertiary Care Center and had been found unable to walk with major symptoms concerning chest pain, dyspnea, pedal odema. She was without a history of profound venous thrombosis and obesity during her first pregnancy. All heart tests together with Chest CT PULMONARY ANGIO tests have been performed. Diagnosed with deep vein thrombosis, CT PULMONARY ANGIO showed intraluminal filling failures hyperdense in the downward arteries right and left, and their segmentary branches with only a small amount of excentric filling failures in the segmental branches of the bilateral high lobes and right middle lobe showing acute pulmonary embolism. On the other hand, her heart exams all revealed normal ECG rhythm, no changes in ST-T, 2D echo showed normal heart chambers with normal cardiac function (EF 70%) and negative results with troponin and NT pro-BNP testing. Testing data were not normally available. Initially it was recommended for 10 days to take rivaroxaban 15 mg tablets. After ten days, the condition was stable with a minor decrease in breathability and 20 mg rivaroxaban was prescribed for 6 months.

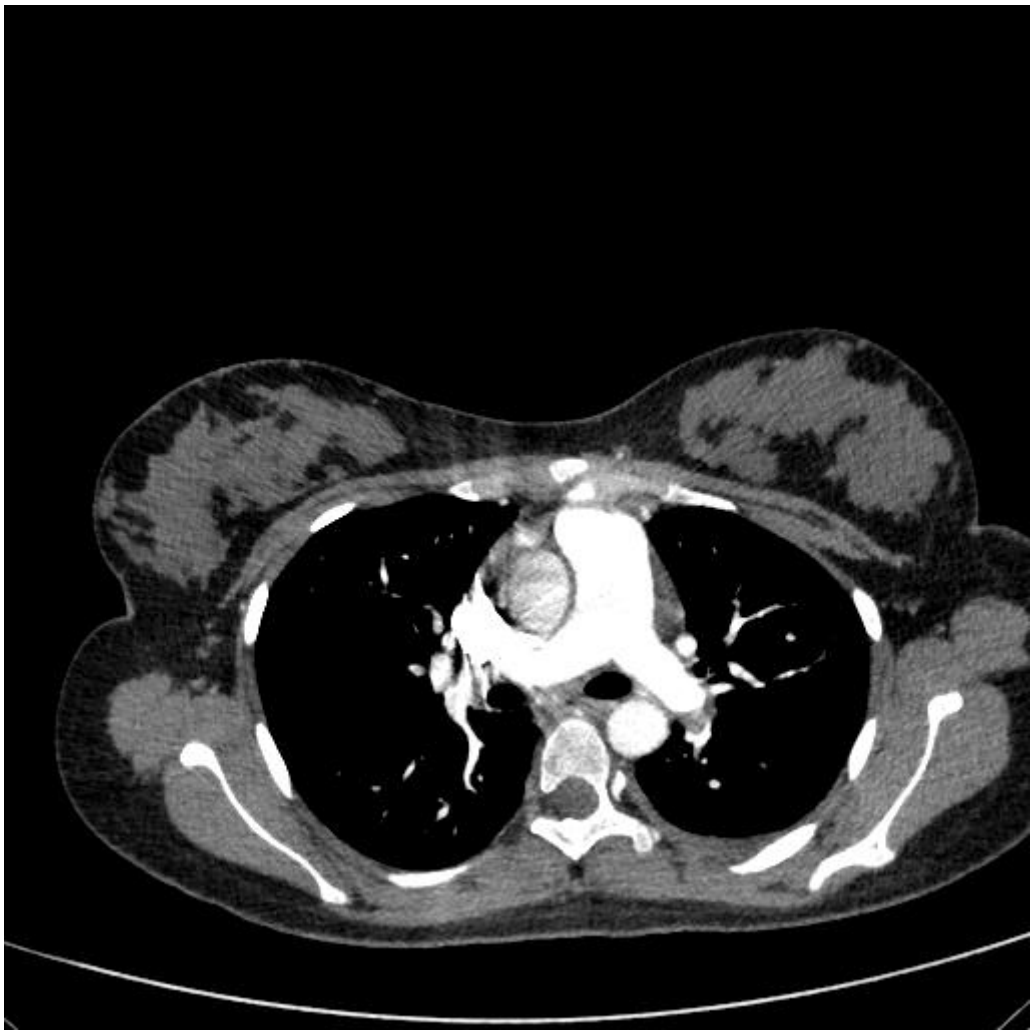

FIGURE: Showing Pulmonary Embolism.

III. Discussion:

The incidence of lung embolism was reported by J.m morris et.al. In a total of 375 pregnancies, there were 0.45/1000 deliveries over a period of six years; 230 in postpartum deliveries. 40 maternal fatalities occurred within their research period. They have therefore proven that there is a considerable risk of lung embolism in the postpartum period. They suggested that the PE risk extends to 4 weeks since a child is born. The 33-year-old woman has been impacted by right ovarian vein thrombosis and bilateral pleural embolism after 1 week of delivery, Leslie Diego et al described one case (3). The highest risk of venous thromboembolism and lung embolism in women with pregnancy occurs mostly during the postpartums(4). A research in the case-control indicated that 95% of VTE after birth took place within a period of four weeks (5).

Active pulmonary embolism is caused most frequently by DVT. Some 79% of PE patients had deep-vein thrombosis reported previously and 50% of DVT patients had PE reported. After 2 days of caesarean birth without DVT history, Javid Ahmed wani et al. reported 34 years of acute lung embolism in the patient with acute PE (6).

The major cause of maternal death (20%) in the economically industrialised countries is venous thromboembolism, including DVT and PE, with 1,2 to 4.7 fatalities per 100,000 pregnancy.

In the first 3 weeks after birth, the risk for caesarean disease remains high, much like throughout pregnancy, from the third week up until the sixth week following delivery.

There are three pathological processes called the triad of Virchow, which can induce a high incidence of VTE together or in isolation. Venous stamina, vascular damage and hypercoagulable condition occur. (7). Clinical VTE presentations are hard to assess as lower extremity edemas exist in the majority of women with healthy housing and well-being pregnant women and up to 70% of pregnant women experience dyspnaeia during pregnancy (7).

The balance between prothrombotic and anticoagulant factors changes progressively during pregnancy, which accelerates deposition of fibrin and reduces fibrinolysis, leading to a procoagulant condition. Furthermore, during the third trimester the flux rate of the lower extremities is down by around 50 percent (8).

Lower extremity edoema, pain and trouble walking, fever, and erythema are common clinical manifestations of DVT. (9) Dyspnea, dry cough, chest discomfort, hemoptysis, breathlessness, tachycardia, sweating, cyanosis and physical indications such as shocks were clinically presented to pulmonary embolism. You may feel an electrical shock-like symptom when the embolism is severe (6 and 9).

Risk factors for VTE among pregnants aged above 35, multiple pregnancies, parity over 4, preeclampsia, varicose veins, C-section delivery, history of VTE, spinal cord trauma, major abdominal surgery, a past history for VTE parents and women with heritage-related thrombotism (e.g., toantithrombin deficiency, facto).

Recently developed and temporary risk factors during pregnancy or after delivery could add up as surgery during or after pregnancy, vomiting, dehydrating, hyperstimulation of ovaries, serious infection (pyelonephritis), stillness, immobility, mass blood loss, extended work, aiding delivery, and post-partum immobility. During pregnancy and after delivery (9). DVT has to be properly diagnosed It is important since up to 24% of women are prone to PE for untreated DVT.

VTE and, in particular, PE diagnosis involves advanced clinical suspicions based on leading diseases and risk factors. The DVT diagnostic test involves D-DIMER, Doppler ultrasound venous colour, MRV, computed tomography and glass contrast.

CT The standard Gold PE was pulmonary vascularisation. After the expanded or big EP, the 2D echogram indicates right ventricular dysfunction. The x-ray and electrocardiograms exhibit non-specific tachycardias and sinus, the most common ECG patterns (9).

Treatment consists of intravenous anticosterol such as heparin non-fragmented, low molecular heparin weight and fondaparinux.

The risk of large bleeding and heparin-inducing thrombopenia is lower than heparin, LMWH and fondaparinux.

Oral anticoagulants, like warfarin, should be initiated within a short period of time, preferably on the same day as parenteral anticoagulants and for at least 5 days until the INR is 2.03.0. The rate of death was demonstrably decreased immediately after therapeutic anticoagulation was identified as PE. In patients with anticoagulant contraindications, venous filters may be utilised as temporary therapy.

The most frequent and important measure for VTE prevention is early departure. It should be encourage to get up to all postpartum patients (10).

IV. Conclusion:

In pregnant women, the DVT PE risk is increased after four to six weeks after delivery. Pregnancy and postpartum women who experience a lower extremity swelling have to be evaluated for DVT to reduce the risk of PE and to start immediately to limit the risk of consequences in any person suspecting PE or DVT anticoagulation. Based on observations, it is vital to recognise and to successfully perform therapy of anticoagulation early to reduce the risk of VTE problems in pregnant and post-partum women.

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