Introduction

Venous thromboembolism (VTE) remains one of the main direct causes of maternal death in the UK. The incidence of Pulmonary Embolism in pregnancy is five times greater than that for non-pregnant women of the same age and is about 1 in every 1500 deliveries. The risks are even higher in the puerperium. The subjective clinical assessment of Pulmonary Embolism (PE) is particularly unreliable in pregnancy as most of the symptoms of Pulmonary Embolism could anyway be present in women during pregnancy. Wells score is a reliable tool in assessing clinical risk of PE in non-pregnant patients, but it is not validated in pregnant women and cannot be used to risk stratify in pregnancy. Although the prevalence of ultimately diagnosed PE in pregnant women with suspected PE is only 2-6%, PE during pregnancy may be fatal in almost 15% of patients and in 2/3rd of these, death will occur within 30 minutes of the embolic event.

Currently, most of the hospitals in the UK manages Pulmonary Embolism as Ambulatory case, but pregnancy is an exclusion criterion in most of the Ambulatory PE pathways. According to Royal College of Obstetricians and Gynaecology (RCOG), there are differences in this way of the group of patients should be investigated, compare to non-pregnant population. In our hospital, this pregnant women were investigated both by Physicians and Obstetricians and no clear guideline was available as to how this group of patients should be investigated.

Key Recommendations by Royal College of Obstetricians and Gynaecologists 2010

- If hypoxic, tachycardic, tachypnoeic or unstable – admit under medics

Pathway for the Investigation of Possible Pulmonary Embolism in Pregnancy

- Therapeutic anticoagulation (LMWH or Warfarin) to be continued for 6 weeks after delivery or 6 months after the initial episode, whichever is longer

Results

Discussion

- Although PE is rare during pregnancy, it can lead to significant mortality and morbidity.
- Since there is no validated risk stratification tool or a blood test available during pregnancy, most of these women with suspected PE needs imaging to exclude it.
- Radiation risk, both to the mother as well as to the fetus is something that most of the pregnant women are concerned about when an imaging is involved in diagnosing an illness during pregnancy. Therefore, it is essential that where feasible, pregnant women should be involved in the decision to undergo CTPA or VQ scanning. Ideally, informed consent should be obtained before these tests are undertaken.
- Although concise guidelines are available with regards to investigation and management of Pulmonary Embolism in non-pregnant patients, there are no clear guidelines available in medicine with regard to pregnancy.

Method

- This was a retrospective audit on a randomly selected sample. Sample was selected using the codes for “symptoms related to PE” AND “pregnancy”. Data was collected using a proforma based on the key recommendations made in the RCOG guidelines.
- Clinical Audit team supported with the formic form and retrieval of case notes and the data were analysed by the author.
- A pathway was formulated with the help of Physicians, Obstetricians and Radiologists after the initial audit and a re-audit was performed after 18 months.

References