

technology was considered as important as the characteristics of physical space to optimize learning. **Conclusion:** This study demonstrates the importance and the impact of physical space design on trainees learning in a dynamic clinical environment. It provides teachers and policy-makers with a basis for developing criteria of the physical characteristics of a healthcare facility to maximize learning.

Keywords: clinical learning environment, emergency department, health care facility design

P065

Development and implementation of a postpartum hypertension recognition and management protocol for use in the emergency department.

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Introduction: Hypertensive disorders of pregnancy (HDP), including preeclampsia, can develop or worsen in the early postpartum period, often following discharge from hospital, resulting in severe preventable maternal morbidity and mortality. Due to a lack of routine early out-patient follow-up, many women with postpartum HDP present to the emergency department (ED) with severe hypertension or symptoms of preeclampsia (e.g., headache). In the ED, postpartum HDP can be difficult for clinicians to recognize (due to vague presenting symptom) and manage (due to lower blood pressure targets and concern of medication safety). ED clinicians recognized a need for timely recognition and effective treatments for postpartum HDP in the ED to improve maternal outcomes. As such, as part of a multi-step quality improvement initiative, an interdisciplinary team developed and implemented a postpartum HDP management protocol (consisting of nursing and physician protocols and an electronic order set embedded in the electronic medical record). The aims of this specific project were to assess: 1) the use of this clinical management protocol in the ED; and 2) its impacts on clinical care. **Methods:** This quality improvement project used electronic medical records to identify: 1) ED visits for postpartum HDP for postpartum women ages 20-50; 2) utilization of the postpartum HDP order set; and 3) clinical care outcomes (consultation and admission). Patient population characteristics and clinical care measures were summarized with descriptive statistics and compared using a before and after design. Changes in the utilization of the protocol were assessed using run charts. **Results:** 540 women with postpartum HDP were seen in the four Calgary EDs in the 16-month period following protocol implementation compared with 335 women in the preceding 12 months. The protocol was used in 46% of these 540 women, and increased over the 16 month follow-up period. We found an increase in the frequency of consultation of specialists (47% to 52%) and admissions (26% to 29%) amongst these women after protocol implementation. **Conclusion:** This initial assessment demonstrated good uptake of a postpartum HDP management protocol including referral for consultation and admission to hospital for blood pressure management. Future steps include evaluation of the impacts of this management protocol on important patient outcomes.

Keywords: quality improvement and patient safety, postpartum hypertension, preeclampsia

P066

Methotrexate in the management of suspected ectopic pregnancy

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Introduction: Early detection of ectopic pregnancy and careful management is critical to prevent adverse clinical outcomes, including fallopian tube rupture and future decreased fertility, in patients presenting to the ED with symptoms suggestive of ectopic pregnancy. Methotrexate therapy is widely accepted as a first line treatment of ectopic pregnancy, with success rates greater than 90% if used according to published guidelines. This study aims to determine the outcomes of pregnant women who presented to the ED with suspected ectopic pregnancy whom received methotrexate as first line treatment. **Methods:** This was a retrospective chart review of pregnant (<12 week gestational age) women from an academic tertiary care ED with a diagnosis of ectopic pregnancy, rule out ectopic pregnancy, or pregnancy of unknown location (PUL) over a 7 year period. **Results:** Of 612 included patients, 30 (4.9%) were diagnosed with a ruptured ectopic pregnancy at the index ED visit. Of the remaining 582 patients, 256 (44.0%) were diagnosed with an ectopic pregnancy at the index ED visit, the Early Pregnancy Clinic, or a subsequent ED visit. Of these patients diagnosed with ectopic pregnancy, their initial treatments at time of discharge from the index ED visit were as follows: 102 (39.8%) received methotrexate, 132 (51.6%) underwent expectant management, and 22 (8.6%) underwent surgical management. Of the 132 patients discharged with an expectant management plan, only 42 (31.8%) had a final outcome of expectant management; the others went on to be treated surgically or with methotrexate. Of the 165 patients treated with methotrexate at index visit or in follow-up, 30 (18.2%) went on to require surgical management with 17 (10.3%) documented as having ruptured on surgical evaluation. Clinical characteristics of patients treated with methotrexate include the following: mean age 32.8 years (SD 5.7), gestational age of 6.2 weeks (SD 1.2) and serum beta human chorionic gonadotropin level of 2702 mIU/mL (SD 8800). **Conclusion:** The proportion of patients receiving methotrexate as first-line treatment that resulted in rupture or required further surgical management is higher than reported literature at this institution. Further investigation is needed to determine if there was a relationship between methotrexate failure and non-adherence to recommended guidelines. Given the risk of a possible rupture, patient education of these risks is critical on discharge from the ED.

Keywords: ectopic pregnancy, patient outcomes, emergency department

P067

Ectopic pregnancy outcomes in patients discharged from the emergency department

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Introduction: The objective of this study was to determine the proportion of women who had a ruptured ectopic pregnancy after being discharged from the ED where ectopic pregnancy had not yet been excluded. **Methods:** This was a retrospective chart review of pregnant (<12 week gestational age) women discharged home from an academic tertiary care ED with a diagnosis of ectopic pregnancy, rule out ectopic pregnancy, or pregnancy of unknown location (PUL) over a 7 year period. **Results:** Of the 550 included patients, 83 (15.1%) had a viable pregnancy, 94 (17.1%) had a spontaneous or missed abortion, 230 (41.8%) had an ectopic pregnancy, 72 (13.1%) had unknown outcomes and 71 (12.9%) had other outcomes which included therapeutic abortion, molar pregnancy or resolution of HCG with no location documented. Of the 230 ectopic pregnancies, 42 (7.6%) underwent expectant management, 131 (23.8%) were managed medically with