

## LO44

**Birth cohort hepatitis C screening in an academic emergency department in Canada: preliminary results**

S. Friedman, MD, MPH, C. Capraru, MD, K. Bates, BScN, D. Porplycia, BSc, MSc, T. Mazzulli, MD, A. Vanderhoff, BSc, B. Hansen, PhD, H. Shah, MD, H. Janssen, MD, PhD, J. Feld, MD, MPH, University Health Network, Toronto, ON

**Introduction:** Epidemiologic and modeling studies suggest that between 45 and 70% of individuals with chronic hepatitis C virus (HCV) infection in Canada remain undiagnosed. The Canadian Association for the Study of the Liver (CASL) recommends one-time screening of baby boomers (1945-1975). Screening programs in the US have shown a very high prevalence of previously undiagnosed HCV among patients seen in the emergency department (ED). We sought to assess the feasibility of implementing a targeted birth-cohort HCV screening program in a Canadian ED setting. **Methods:** Patients born from 1945 to 1975 presenting to the ED of a downtown Toronto hospital were offered HCV testing. Patients with life-threatening conditions, unable to provide verbal consent in English or intoxication were excluded. Blood samples were collected by finger prick on Dried Blood Spot (DBS) collection cards and tested for anti-HCV antibody with reflex to HCV RNA. Patients with positive HCV RNA were referred to a liver specialist. **Results:** During a 27-month period (July 2017 - Sept 2019), 8363 patients in the birth cohort presented to the ED during daytime hours. 80% (6714) met eligibility criteria, and 48.4% (3247) were offered testing. Screening was performed by non-medical staff (mean 8/day, median spots on DBS 4). 345 (10.6%) had been previously tested, and 639 (19.7%) declined. 2136 (65.8%) patients underwent testing: median age 58.4 years (40-82), 1117 male (52.3%). Of these, 45 patients (2.1%; 95% CI 1.5%-2.7%) were anti-HCV positive: 32 (76.2%) were HCV RNA positive, 10 (23.8%) negative and 3 not done due to inadequate DBS sample. 26 patients (81.3%) were linked to care and 3 (9.4%) lost to follow-up. HCV prevalence in the ED was significantly higher than the general Canadian population (2.1% vs 0.7%;  $p < 0.0001$ ) but much lower than reported rates in American EDs (2.1% vs 10.3%;  $p < 0.0001$ ). **Conclusion:** Acceptance of HCV screening in the ED birth cohort was high and easily performed using DBS to ensure the majority of positive samples were tested for HCV RNA. Challenges included implementation that limited number of people tested, and linkage to care for HCV positive patients. HCV prevalence among this ED birth cohort was higher than the general population but lower than seen in the ED in the US. This may in part be due to exclusion of individuals with more severe medical issues, refusal by higher risk subgroups, or population and healthcare system differences between countries.

**Keywords:** hepatitis C, screening

## LO45

**Women's perspectives on early pregnancy complications and supportive care needs: a qualitative multi-site study**

K. Dainty, PhD, B. Seaton, MSc, V. Rojas-Luengas, BSc, S. McLeod, MSc, M. Tunde-Byass, MD, E. Tolhurst, MD, C. Varner, MD, MSc, Mount Sinai Hospital - University of Toronto, Toronto, ON

**Introduction:** Women experiencing early pregnancy loss or threatened loss frequently seek care in emergency departments (ED) or early pregnancy clinics (EPC). The dearth of existing qualitative studies has left understudied questions about how these women perceive their healthcare and which strategies best meet their supportive care

needs, particularly in the Canadian context. The objective of this study was to deepen our understanding of these women's experiences and gain insight into how clinicians and healthcare services can lessen the impact of this traumatic event on patients and their families.

**Methods:** We conducted a descriptive qualitative study of women who presented to the ED or EPC at an urban tertiary care hospital and an urban community hospital for early pregnancy loss or threatened loss. Purposive sampling was used to recruit patients for in-depth, one-on-one telephone interviews conducted 4-6 weeks after the index visit. Data collection and analysis were concurrent and continued until thematic saturation had occurred. Data analysis was led by two qualitative researchers with support from a multi-disciplinary research team following standard thematic analysis techniques. **Results:** Interviews were completed with 59 women between July 2018 and August 2019. Participants ranged in age from 22 to 47 years and reflect the diversity of the multicultural city where the study occurred. Our analysis revealed that the medicalization and normalization of early pregnancy complications among ED and EPC clinicians is at odds with women's general lack of knowledge about the frequency, personal risk, causation, duration, and physical intensity of the miscarriage experience. Women identified the value of rapid access to appointments, point of care ultrasound, detailed care plans, and knowledgeable advice as key to lessening the physical and emotional trauma related to early pregnancy loss. **Conclusion:** This research highlights the physical, emotional, and psychological complexity of a medical situation frequently minimized within the current healthcare system. The results impart important knowledge about which aspects of ED and EPC care are most valued by women experiencing early pregnancy loss or threatened loss and demonstrate the clear need for women and their families to be provided with more education about the totality of the early pregnancy experience, including the possibility of pregnancy complications and loss.

**Keywords:** early pregnancy loss, miscarriage, patient experience

## LO46

**Prognostic value of single serum progesterone in the evaluation of symptomatic pregnant patients: a systematic review and meta-analysis**

B. Ghaedi, MSc, S. Ameri, MD, K. Abdulkarim, BSc, V. Thiruganasambandamoorthy, MSc, Ottawa Hospital Research Institute, Ottawa, ON

**Introduction:** Pain and bleeding complicate 30% of pregnancies threatening viability. The objective of this systematic review is to evaluate the role of a single progesterone level in predicting viability.

**Methods:** We comprehensively searched MEDLINE, Embase (OVID), CINAHL and Cochrane databases from inception to July 2019. We included English language studies that enrolled symptomatic first trimester pregnant patients, measured progesterone and reported viability (miscarriage, ectopic or viable). We excluded studies with patients who had progesterone treatment, or conception after induced ovulation/invitro fertilization. We extracted patient characteristics, study setting, mean progesterone, the cut off value and outcome (viability). The quality of the included studies was assessed using Quality Assessment of Diagnostic Accuracy Studies-2 (QUADAS-2) tool. We extracted data for 2X2 tables and report mean, standard deviation (SD), sensitivity, specificity, positive and negative predictive values (PPV, NPV). **Results:** Of the 689 studies screened, 51 studies with 15783 patients were included (1 randomized control trial, 36 prospective, 9 retrospective, 5 prospective case control studies) and 7553