were viable pregnancies. Of the 31 studies (n = 10998) that reported ectopic, 1661 patients were diagnosed with ectopic pregnancy. In 35 studies (n = 6003) that reported mean and SD, the levels were higher in viable (26.7 ± 11.2ng/ml) than non-viable (9.5 ± 5.9ng/ml; p < 0.001) or ectopic pregnancy 9.5 ± 6.8ng/ml (p < 0.001). The pooled diagnostic characteristics at different cut-off values were: <6.3ng/mL (9 studies; N = 6033) sensitivity 65.0% (95%CI 63.5,66.5), specificity 97.3% (95%CI 95.5, 98.5), PPV 99.4% (95%CI 99.1,99.7) and NPV 27.4 (95%CI 26.6,28.4); <10 ng/mL (12 studies with 5743 participants) sensitivity 65.0% (95% CI 63.5, 66.5), specificity of 97.3% (95%CI 95.5, 98.5), PPV 99.4% (95% CI 99.1, 99.7) and NPV 27.4% [95% CI 26.5, 29.4); 11-20 ng/mL (24 studies with 7141 participants) sensitivity 77.3% (95% CI 76.2,78.4), specificity 64.6% (95% CI 63.2, 65.9), PPV 73.2% [95% CI 72.3, 73.9) and NPV 69.5% (95% CI 70.7, 72.5). There was low risk of bias for patient selection, index test and low concern regarding applicability. The highest risk (82% of studies) was due to outcome ascertainment bias due to non-blinding of index and additional tests. **Conclusion:** A single progesterone value is useful in predicting viability of pregnancy among symptomatic patients.
Keywords: ectopic pregnancy, pregnancy viability, progesterone

LO47

Hematochezia in children with acute gastroenteritis in the emergency department: clinical phenotype, etiologic pathogens, and resource utilization

M. Böhrer, BSc, MD, E. Fitzpatrick, MN, K. Hurley, MD, J. Xie, MD, MPH, B. Lee, MD, X. Pang, PhD, L. Chui, PhD, P. Tarr, MD, S. Ali, MDCM, O. Vanderkooi, MD, S. Freedman, MDCM, MSc, Dalhousie University / IWK Health Centre, Halifax, NS

Introduction: Acute bloody diarrhea obligates rapid and accurate diagnostic evaluation; few studies have described such cohorts of children. **Methods:** We conducted a planned secondary analysis employing the Alberta Provincial Pediatric EnTeric Infection TEam (APPETITE) acute gastroenteritis study cohort to describe the characteristics of children with acute bloody diarrhea, compared to a cohort of children without hematochezia. Children <18 years of age presenting to 2 pediatric tertiary care emergency departments (EDs) in Alberta, with ≥3 episodes of diarrhea and/or vomiting in the preceding 24 hours and <7 days of symptoms were consecutively recruited. Stools were tested for 17 viruses, bacteria and parasites. Primary outcomes were clinical characteristics and pathogens identified. Secondary outcomes included interventions and resource utilization. **Results:** Of 2257 children enrolled between October 2015 and August 2018, hematochezia before or at the index ED visit was reported in 122 (5.4%). Compared to children with nonbloody diarrhea, children with hematochezia had longer illness duration [59.5 vs. 41.5 hrs, difference 10.6, 95% CI 3.5, 19.9], more diarrheal episodes in a 24-hour period [8 vs. 5, difference 3, 95% CI 2, 4], and less vomiting [55.7% vs. 91.1%; difference -35.3%; 95% CI -44.7, -26.3]. They received more intravenous fluids [32.0% vs. 18.3%; difference 13.7%, 95% CI 5.5, 23.0], underwent non-study stool testing [53.7% vs. 4.8%; difference 49.0%, 95% CI 39.6, 58.0], experienced longer ED visits [4.1 vs. 3.3 hours, difference 0.9, 95% CI 0.3, 1.0] and were more likely to have repeat healthcare visits within 14 days [54.8% vs. 34.2%; difference 20.6%, 95% CI 10.8, 30.1]. A bacterial enteric pathogen was found in 31.9% of children with hematochezia versus 6.6% without bloody diarrhea (difference 25.4%, 95% CI

17.2, 34.7). In children with hematochezia, the most commonly detected bacteria were Salmonella spp. (N = 15), Shiga toxin-producing E. coli (N = 9), Campylobacter spp. (N = 7), and Shigella spp. (N = 5). Viruses were detected in 32.8% of children with bloody diarrhea, most commonly adenovirus (N = 15), norovirus (N = 14), sapovirus (N = 8) and rotavirus (N = 7). **Conclusion:** Children with hematochezia differed clinically from those without hematochezia and required more healthcare resources. While bacterial etiologies are common, several viruses were also detected.
Keywords: acute bloody diarrhea, enteric pathogens, paediatrics

LO48

Pediatric cannabinoid hyperemesis syndrome in the emergency department: a 5-year retrospective review

D. Foster, BSc, K. Van Aarsen, MSc, J. Yan, MD, MSc, J. Teefy, MD, T. Lynch, MD, Schulich School of Medicine and Dentistry, Western University, London, ON

Introduction: Cannabinoid Hyperemesis Syndrome (CHS) in pediatric patients is poorly characterized. Literature is scarce, making identification and treatment challenging. This study's objective was to describe demographics and visit data of pediatric patients presenting to the emergency department (ED) with suspected CHS, in order to improve understanding of the disorder. **Methods:** A retrospective chart review was conducted of pediatric patients (12-17 years) with suspected CHS presenting to one of two tertiary-care EDs; one pediatric and one pediatric/adult (combined annual pediatric census 40,550) between April 2014-March 2019. Charts were selected based on discharge diagnosis of abdominal pain or nausea/vomiting with positive cannabis urine screen, or discharge diagnosis of cannabis use, using ICD-10 codes. Patients with confirmed or likely diagnosis of CHS were identified and data including demographics, clinical history, and ED investigations/treatments were recorded by a trained research assistant. **Results:** 242 patients met criteria for review. 39 were identified as having a confirmed or likely diagnosis of CHS (mean age 16.2, SD 0.85 years with 64% female). 87% were triaged as either CTAS-2 or CTAS-3. 80% of patients had cannabis use frequency/duration documented. Of these, 89% reported at least daily use, the mean consumption was 1.30g/day (SD 1.13g/day), and all reported ≥6 months of heavy use. 69% of patients had at least one psychiatric comorbidity. When presenting to the ED, all had vomiting, 81% had nausea, 81% had abdominal pain, and 30% reported weight loss. Investigations done included venous blood gas (30%), pregnancy test in females (84%), liver enzymes (57%), pelvic or abdominal ultrasound (19%), abdominal X-ray (19%), and CT head (5%). 89% of patients received treatment in the ED with 81% receiving anti-emetics, 68% receiving intravenous (IV) fluids, and 22% receiving analgesics. Normal saline was the most used IV fluid (80%) and ondansetron was the most used anti-emetic (90%). Cannabis was suspected to account for symptoms in 74%, with 31% of these given the formal diagnosis of CHS. 62% of patients had another visit to the ED within 30 days (prior to or post sentinel visit), 59% of these for similar symptoms. **Conclusion:** This study of pediatric CHS reveals unique findings including a preponderance of female patients, a majority that consume cannabis daily, and weight loss reported in nearly one third. Many received extensive workups and most had multiple clustered visits to the ED.
Keywords: cannabinoid hyperemesis syndrome, nausea and vomiting, pediatrics