blood and acid fast bacteria sputum smear. We followed patients until inpatient death or discharge. Our primary outcome of interest was the cause of sepsis. We also performed multivariable logistic regression to assess predictors of mortality. We enrolled 216 participants who were 51% female with a median age of 32 years (IQR 27-43 years). Of these, 122 subjects were HIV-seropositive (56%) of whom 75 (66%) had a CD4 count <100 cell/µL. The prevalence of malaria was 3.7% (6 with Plasmodium falciparum, 2 with P. vivax, and 1 with mixed Plasmodium species). In-hospital mortality was 19% (n=42). In multivariable regression analysis, Glasgow Coma Score <9 (IQR 4.81, 95% CI 1.80-12.8) and severe sepsis (IQR 2.07, 95% CI 1.03-4.14), but no specific diagnoses, were statistically associated with in-hospital mortality. In conclusion, malaria was an uncommon cause of adult sepsis in a regional referral hospital in southwestern Uganda. In this setting, we recommend thorough evaluation for alternate causes of disease in patients presenting with sepsis.

HOSPITAL-BASED SURVEILLANCE FOR ROTAVIRUS AND INTUSUSCEPTION AMONG YOUNG CHILDREN IN BANGLADESH

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The Government of Bangladesh plans to include a rotavirus vaccine in the country's immunization program in 2014 to reduce hospitalizations and deaths due to rotavirus. The Institute of Epidemiology, Disease Control and Research and icddr,b began surveillance in June 2012 to generate geographically representative pre-vaccination baseline data for rotavirus and intussusception-related hospitalizations, and describe circulating rotavirus strains. In five tertiary hospitals throughout Bangladesh, research staff collected fresh stool samples, and demographic and clinical information from every 4th patient aged <5 years admitted with acute gastroenteritis (AGE), defined as ≥3 watery stools or ≥1 episode of forceful vomiting within a 24-hour period. We used a 20-point Ruska-Vesikari severity scale to measure the clinical severity of patients' symptoms. Stool samples were tested for rotavirus antigens by enzyme immunoassay, and 25% of the rotavirus positive specimens were selected for genotyping. Children <2 years of age hospitalized with intussusception confirmed by either surgery or radiology were listed and followed-up at home one month after discharge to ascertain outcomes. From July 2012 to February 2013, we enrolled 537 AGE patients; 71% had rotavirus antigens detected in stool; two of these children died. The majority (52%) of the confirmed rotavirus case-patients were 6-11 months of age. The proportion of AGE cases with rotavirus peaked between November 2012 through February 2013 (median 80%). Clinical severity was significantly higher (mean 13.1 vs. 12.2, p < 0.01) in children with compared to those without rotavirus. Among 60 strains genotyped, G1 (45%) was the most common strain followed by G12 (35%) and G9 (20%). Twelve children were diagnosed with intussusception and one died. Rotavirus is a major cause of childhood hospitalization for AGE in Bangladesh, and exhibits considerable genotypic diversity. It will be important to continue surveillance through the introduction of vaccine to estimate the reduction in rotavirus hospitalizations, describe changes in strain diversity, and to identify any increase in patients seeking care for intussusceptions which could represent adverse events.

ISOLATION, DETECTION AND MOLECULAR CHARACTERIZATION OF LEPTOSPIRA SP. ISOLATED FROM ANIMAL AND ENVIRONMENTAL SOURCES IN MALAYSIA

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Leptospirosis is a globally important zoonotic disease caused by spirochetes of the genus Leptospira. In Malaysia, leptospirosis is an emerging disease and determination of the circulating serovars is essential to public health. Isolation of Leptospira is confirmatory for diagnosis; however, culture is insensitive and often takes months for the organisms to grow. Therefore, there is a need for rapid diagnosis and identification of Leptospira to guide public health interventions during outbreaks. This study aimed to develop a rapid PCR-based assay for early detection of Leptospira using primers that targeted the 16S rRNA gene. A second primer set targeted the Iggl gene to differentiate pathogenic strains. Specificity and sensitivity was 100% using 12 Leptospira reference strains of multiple species and 10 non-leptospiral bacteria. The pathogenicity of all 12 reference strains could be differentiated using the Iggl PCR. The limit of detection was 2.09 x 10^5 DNA and 10^6 leptospira/ml in spiked urine and water. Samples from rats (n=350), dogs (n=150), cats (n=50), water and soils (n=120) were used in this study. A total of 34 isolates were confirmed as Leptospira genus (25 rats, 1 dog, and 8 water). Twenty-nine isolates were classified as pathogenic using the PCR while the remaining 5 were saprophytic. The genomic diversity of the 34 Leptospira isolates was determined using pulsed-field gel electrophoresis (PFGE) and randomly amplified polymorphic DNA (RAPD). PFGE of Mot-Hidgested chromosomal DNA subtyped the 34 isolates into 11 pulse types, while RAPD produced 18 profiles. Both PFGE and RAPD were able to differentiate the zoonotic and environmental isolates. In conclusion, primers developed for the PCR were able to successfully determine the genus and pathogenic status of the Leptospira strains. With its specificity and rapidity, these PCR tests are a promising tool for the early detection of Leptospira spp. from different sources. RAPD could be an alternative subtyping tool for Leptospira isolates as it is easier and could generate results more rapidly than PFGE.

SURGICAL NODULECTOMIES CAN HEAL IN LYMPHODEMA PATIENTS IN RESOURCE POOR SETTINGs

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Podocnosis, a geochemical dermatosis leading to severe lymphoedema is estimated to affect at least 1 million people in Ethiopia. Although there are encouraging responses to treatment using foot hygiene, bandaging and foot wear, wooden hard fibrous nodules complicating the clinical picture in some patients are resistant to therapy. Surgical interventions to the limits are of concern in all lymphoedema patients due to the risk of poor healing. We present our experience with a series of nodulectomies performed in Northern Ethiopia in a resource-limited setting. Podocnosis patients with persisting significant fibrous nodules despite conventional therapy were offered limited surgical nodulectomies. These were performed under local anaesthetic. Fibrotic nodules and tumours were excised with a surgical blade, aiming for the narrowest possible base. Redundant skin was shaved off and haemostasis achieved. The area was cleaned with normal saline, dressed with sterile gauze and compression bandages applied. Wounds managed in this way healed by secondary intention. Eleven patients were reviewed and wounds cleaned and dressed on alternate days in the nearby local clinic. The end point was recorded as time to re-epithelialisation in days post surgery. Eighteen surgical nodulectomy operations were undertaken on eleven patients. All patients attended at least one occasion for review. Average time to complete astmhf.org