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of the reported outbreaks. The importance of NoV as an etiological agent of acute gastroenteritis in both sporadic cases and outbreaks have been determined after the development of molecular methods for their detection. NoVs are mainly caused by Genogroup I (GI) and II (GII) strains, and the GII is considered predominant worldwide and also have been increasingly identified a relevant etiological agents among hospitalized children. The aim of this study was to evaluate the frequency of NoVs infection in children under 5 years old that were hospitalized with acute diarrhea, in São Paulo State. The prospective surveillance study was carried out from September 2009 through April 2011. Stool samples from 325 children hospitalized were tested for NoV using a commercial immunoenzymatic assay (RIDASCREEN® 3thGeneration Norovirus, R-Biopharm AG, Darmstadt, Germany). A total of 95 of 325 (29.2%) stool samples collected were norovirus-positive. Among these, 67 NoVs strains (70.5%; 67/95) were selected and analyzed by RT-PCR assay using primers set deduced from the 3’ end conserved genome region of Pol ORF 1 (MON 431, 432, 433, 434). NoV Genogroup GI was detected in 97.0% of samples analyzed (65/67), and only two samples were positive for GI (3.0%), considered as sporadic cases. NoV GI detection is agree with previous works, that describe a great incidence and distribution of this Genogroup worldwide, including Brazil. This research highlights that NoV is an important viral etiology of pediatric acute gastroenteritis in São Paulo State, and the implementation of NoV screening by the ELISA followed by the RT-PCR, is a necessary strategy for the clinical diagnosis in Public Health Laboratories. An effective NoV vaccine would bring a significant benefit to decrease the viral gastroenteritis disease.

HV170-HIGHRISKHUMANPAPILLOMAVIRUS AND ALTERATIONS IN ANNEXIN A1 AND P53 EXPRESSION IN PENILE CANCER

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Penile cancer is an epithelial tumor with high morbidity. It is rare in developed countries and it is associated to socioeconomic profile of the patients. In Brazil it is estimated that occur between 2.9 to 6.8 cases per 100,000 inhabitants. Treatment is usually by penectomy with one thousand surgeries occurring every year in this country. Without treatment patients die within 2 years after diagnosis of the first lesions. The knowledge about tumorigenesis and progression is poor and the molecular mechanisms and etiology are not fully understood. However some risk factors are well established as poor personal hygiene, lack of circumcision in childhood, use of tobacco and human papillomavirus (HPV) infection. There are few studies on the role of the HPV infection in these tumors. The incidence ranges from 30 to 100% depending on the detection method used. The aims of this work are to evaluate the incidence of HPV infection in penile cancer and to access the genetic alterations associated to these infections. Formalin-fixed, paraffin-embedded tissues from patients harboring penile cancer was tested for HPV DNA by PCR with general primers GP5+/GP6+. The HPV positive samples were then typed by a reverse hybridization assay (INNO-LiPA, Innogenetics). The overall HPV incidence in the tumor tissues was 75.7%, being high risk 52.4% and low risk 20.2%. Rapid subtraction hybridization (RaSH) assay followed by real time PCR validation was used to detect genes which expression was altered in penile tumors. Immunohistochemistry was used to verify if the protein expression is altered too in these tissues. In cancerous tissues annexin A1 shown to be overexpressed while p53 is down-expressed in contrast with normal tissues used as control. These results indicate that HPV has a high incidence in penile cancer and can interfere with molecular mechanisms that can lead to malignant transformation.

HV171 - SUSCEPTIBILITY TO THE MEASLES VIRUS IN TIMES OF ERADICATION.


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Measles is an infectious disease caused by a Morbillivirus transmitted by secretions from the respiratory airways. In Brazil, the last autochthonous case of measles occurred in 2000, at the State of Mato Grosso do Sul. The endemic circulation of measles in the Americas was interrupted in 2002 after the implementation of the eradication of measles, with the intensification of epidemiological surveillance and vaccination in the country, in order to prevent the chain of virus transmission and the introduction of imported cases. We performed a retrospective analysis of the database in order to verify the susceptibility to measles virus in patient samples from the spontaneous Evandro Chagas Institute demand. We analyzed serum samples from 434 patients assisted in 2010 with exanthema. Age, sex, month of serum collection and identification of measles-specific IgG antibodies by ELISA were assessed. The results showed 36.9% of susceptible individuals, of which the female gender prevailed with 20.3%, the highest susceptibility was at the age group between 1 and 11 years with 32%, followed by less than one year with 30%, from 12 to 19 years with 22% and from 20 to 29 years with 10%. During the year studied the susceptibility ranged from 25% (December) to 52% (February). Investigated at different ages, the proportion of
Human papillomaviruses (HPV) are DNA tumor viruses belonging to the papillomaviridae family of virus. They have a strong epitheliotropism for stratified squamous epithelial cells of the skin and mucous membranes. Oncogenic high-risk HPV types are associated to development of neoplasias in diverse organs. To date more than 120 different types of HPV have been described. This work analyses the presence of HPV in two cases of squamous cell carcinoma of the penis that was followed after treatment by development of another primary tumor in organs others than the penis. Both primary tumors have been associated to HPV infection.

Case 1: Caucasian man, 66 years old, diagnosed with penile squamous cell carcinoma, treated with partial penectomy. One year after surgery patient was diagnosed with penile squamous cell carcinoma, treated with total penectomy. Both primary tumors have been associated to HPV infection.

Case 2: Caucasian man, 74 years old, diagnosed with a tumor in esophagus. After an episode of aspiration pneumonia patient evolved quickly dying with respiratory arrest due to pleural effusion and emphysema. The case was observed. Patient died before a possible treatment for necrotizing fasciitis. Case 2: Caucasian man, 74 years old, diagnosed with penile squamous cell carcinoma, treated with partial penectomy. One year after surgery patient was diagnosed with a tumor in esophagus. After an episode of aspiration pneumonia patient evolved quickly dying with respiratory arrest due to pleural effusion and emphysema. Sample tissues from the cancers of both patients was collected and conserved in paraffin. Detection of HPV DNA was performed by PCR assay with general primers GP5+/GP6+. HPV typing was done by reverse hybridization (INNO-LiPA, Innogenetics). HPV16 is the most prevalent HPV genotype in diverse types of tumors and it was detected in all samples from both patients. These cases show the need for more studies regarding the possibility of multiple tumors caused by HPV in the same patient.