

### A hunt for *Candida auris* in Abha, the asir province of Saudi Arabia

E. Paul<sup>1,\*</sup>, E. Shobowale<sup>2</sup>, I. Alzaydani<sup>3</sup>, A. Hawan<sup>4</sup>, A. Hakami<sup>1</sup>, M. Quasem<sup>2</sup>, S. Alkahtani<sup>4</sup>, M. Mahfouz<sup>2</sup>

<sup>1</sup> College Of Medicine, King Khalid University

<sup>2</sup> Laboratory and Blood Bank, Asir Central hospital

<sup>3</sup> Department of Pediatrics, Maternity and Children's Hospital, Ministry of Health, 62521 Emirate Al Shifa Abha, Saudi Arabia

<sup>4</sup> Department of Pathology/ Microbiology and Blood Bank, Armed Forces Military hospital, Southern region, Khamis Mushayat, 62413, Saudi Arabia

**Background and Purpose:** *Candida auris* is an emerging global disease that has been the cause of several outbreaks in health-care facilities over the past decade. However, cases have yet to be reported from the Kingdom of Saudi Arabia. The main aim of this study was to detect any case of *Candida auris* among the intensive care patients, in - patients and out-patients from the three main tertiary care hospitals in the Asir region Abha, Saudi Arabia.

**Methods:** This prospective study was carried out over a period of six months. Blood samples, urine samples and samples from other sites were obtained from patients in intensive care units, medical wards, surgical wards and out-patient departments. Initial Identification was using the VITEK 2 (Biomérieux). As per the CDC recommendations, organisms like *Candida haemulonii*, *Candida catenulata*, *Candida famata*, *Candida guilliermondii* and *Candida lusitanae* were presumed to be *Candida auris*. Then further accurate identification was to be carried out using Bruker Biotyper matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) devices and VITEK -MS.

**Results:** Out of a total of 150 samples, only 79 samples (52.6%) were positive for *Candida* species. *Candida* species were more commonly isolated from the ICU/PICU/NICU and CCU (49.36%). They were more commonly isolated from other samples in the ICU as compared to blood samples. (Chi-square statistic 5.5279, p-value 0.018715, p<0.05, this is significant). Most common species that was isolated was *C. albicans* (51.2%), *C. tropicalis* (24.4%), *C. glabrata* (8.4%), *C. dubliniensis* (4.9%), *C. kefyr*, *C.parapsilosis*, and *C.utilis* (1.2%).

**Conclusion:** In our study using the VITEK 2, none of the organisms that could have been *Candida auris* were identified. It can be assumed that *Candida auris* are yet to be isolated in this part of Saudi Arabia. There is a need for the awareness of *Candida auris* among the clinicians for early identification and treatment. Hunt is on.

<https://doi.org/10.1016/j.jiph.2018.10.088>



### Emergence of rotavirus G2P [9] genotype, prevalence of rotavirus infection and adverse effects of vaccination among the post vaccinated children below five years in the Asir region of Saudi Arabia

E. Paul<sup>1,\*</sup>, I. Alzaydani<sup>2</sup>, A. Hawan<sup>3</sup>, A. Hakami<sup>1</sup>, H. Chandramoorthy<sup>1</sup>, S. Alkahtani<sup>3</sup>, A. Asiri<sup>2</sup>

<sup>1</sup> College Of Medicine, King Khalid University

<sup>2</sup> Department of Pediatrics, Maternity and Children's Hospital, Ministry of Health, 62521 Emirate Al Shifa Abha, Saudi Arabia

<sup>3</sup> Department of Pathology/ Microbiology and Blood Bank, Armed Forces Military hospital, Southern region, Khamis Mushayat, 62413, Saudi Arabia

**Background and Purpose:** Rota virus vaccination was introduced into the National Immunization schedule of Saudi Arabia in 2013. The prevalence of Group A rotavirus before the introduction of Rotarix vaccine (RV1) was between 12%–46% respectively, however the current prevalence rate has fallen to 6.8%. The purpose of our study is to explore the prevalence of RV infection, investigate the predominant genotypes of RV in this part of Saudi Arabia and evaluate the adverse effects of the Rotarix vaccine (RV1) and the clinical presentation of gastroenteritis as per the Modified Vesikari Score (MVS).

**Methods:** Stool samples were collected from all the patients below the age group of 5 years with complaints of gastroenteritis during the study period of nine months (August 2017–April 2018). A questionnaire was used to record the clinical symptoms by using the MVS method, history of the rotavirus vaccination, side effects of immunization was also documented from the parents of the children after obtaining informed consent. The stools samples were processed, and the Rotavirus antigen rapid test was to detect the rotavirus antigens in stool. Viral genomic RNA was extracted, and RT-PCR was done.

**Results:** The prevalence of rotavirus infection was 8.9%. G2P [4] and G2P [9] a new genotype strain in the Asir region of Saudi Arabia were the prevalent strains among the RV positive cases. The significant side effects of RV vaccination immediately following either of the two doses of immunization was continuous diarrhea, vomiting, and fever. Factors like male gender or rural location did not play any statistically significant role in the development of RV infections.

**Conclusion:** The emergence of G2P [9] is a novelty in this part of Saudi Arabia. Further studies on G2P [9] RV strains and other rare strains in this part of the world will be beneficial at the National and the International level.

<https://doi.org/10.1016/j.jiph.2018.10.089>

### Pattern and Risk Factors of Sharp Object Injuries among Health Care Workers

A. Hagag

King Abdullah Medical City

**Background and Purpose:** To assess pattern and risk factors of sharp object injuries in King Abdullah Medical City.

**Methodology:** Retrospective review of registry records from infection control documentation sheet that was used to collect data including all employees exposed to sharp object injuries during 2017.

**Results and Discussions:** A total of 48 employees were exposed to sharp object injuries during 2017.

