Background. In severe malaria, artesunate decreases mortality compared to quinine. Artesunate’s introduction into clinical use in malaria-endemic areas revealed a unique adverse effect: severe hemolysis appearing several weeks after treatment completion. Though initial reports of post-artesunate hemolysis (PAH) were gathered from adults, we took into account a total of 1019 patients with leukemia, from which we eliminated 12 with a different diagnosis, obtaining a total of 907 patients. Of these, 23.1% had evidence of a new malaria infection. When children treated with artemisinin derivatives presented with a decrease in hematocrit at one month in hospitalization, 21.3% had evidence of a new malaria infection. When children treated with quinine and artesunate were combined, a higher hematocrit on admission, lower quantititative histidine rich protein 2 level, and splenomegaly were independently associated with a post-treatment decrease in hematocrit.

Conclusions. In African survivors of CM, post-treatment hemolysis is rare, mild, and unassociated with the antimalarial treatment received.

#24: Neutropenic Enterocolitis in the Pediatric Patient with Hematological Cancer at Centro Medico Nacional 20 de Noviembre, from June 2019 to May 2020 Maria E. Martinez M.D.1, Elizabeth Galán M.F.P.2, Department of Pediatric Infectious Disease.

Background. Neutropenic enterocolitis is a life-threatening condition which occurs in patients suffering neutropenia (absolute neutrophil count ≤ 500 / mm3), where secondary to the use of chemotherapy there is an aggressive destruction of tumor cells, which alters the rapid replication phase, in which different types of epithelia are also involved, this is why they decrease their turnover rate, evolving into injury in the intestinal mucosa, especially at the level of the terminal ileus and cecum, although it can affect any part of the intestine. Clinically manifested by fever, pain, and abdominal distension; it is more frequently associated with hematological cancer, although it can occur in other types of cancer. CT is the Gold Standard for diagnosis. Ultrasoundography may also be useful, however, this diagnostic tool is operator dependant so sensitivity and specificity decrease. Medical treatment is usually sufficient, but surgical intervention may be necessary in patients with perforation or deterioration.

Methods. The incidence of Neutropenic Enterocolitis cases in the pediatric population was identified by means of a descriptive, cross-sectional and retrospective study. We used medical records of patients admitted with a diagnosis of leukemia. Data analysis was carried out by means of a non-probability sampling for convenience, creating the database in electronic system followed by the data analysis obtained by the JASP software version 0.13.1.0.

Results. We took into account a total of 1019 patients with leukemia, from which 95.58 % (n=974) were ALL (Acute Lymphoblastic Leukemia) and 4.41 % (n=45) AML (Acute Myeloblastic Leukemia); the Neutropenic Enterocolitis diagnostic, gave us 49 files, from which we eliminated 12 with a different diagnosis, obtaining a total sample of 37 clinical records. The most affected population was the group of between 10–17 years with an incidence of 51.35, the most common type of hematologic cancer was ALL representing 86.4 % of the cases, from which 40.54 % were in the induction phase of treatment when they started with the clinical symptoms of neutropenic enterocolitis, being the fever, abdominal pain and diarrhea the most common symptoms. The diagnosis was made based on clinical presentation, and radiology tests being abdominal ultrasound the most common diagnostic tool. The most efficacious treatment because there were no complications and there was no need for escalation, was Piperacillin/Tazobactam, followed by Meropenem.

Conclusions. Neutropenic Enterocolitis was more frequently diagnosed in patients with ALL and in those who were receiving the induction phase of treatment; a total of 28 % presented with sepsis or septic shock. The antibiotic scheme Piperacillin/Tazobactam was sufficient and modifications like Ceftirixone/Metronidazole which had to be scaled to carbapenem and just 10.81 % of the patients had the Gold Standard diagnostic tool (Abdominal Computed Tomography).

Background. In recent decades, advances in cancer treatment have made it possible to improve the prognosis of hemat-oncological patients, however, mortality is still high in developing countries. One of the most important causes of morbidity and mortality during the treatment of children with cancer is infectious complications, especially in the induction phase. The multiple interventions that are carried out during treatment increase the risk of developing these infections, which can be more frequent if the recommended strategies to prevent them are not applied. The objective of this study was to investigate what were the causes of death in children with cancer at our institution.

Methods. The medical records of deceased patients were analyzed in the onco-hematology unit of the children’s Hospital “Dr. Ovidio Aliaga Uria” in the city of La Paz, Bolivia. The causes of mortality, the stage of chemotherapy in which the death occurred, its relationship with infections and the microorganism identified during 2020 were classified.

Results. During 2020, 19 deaths were found in cancer patients, the mean age was 8.5 years and of which 52% were male. Regarding the basic diagnosis, there was a higher proportion of hematological diseases 68% and solid tumors 32%. Among the causes of death, 58% were due to their underlying pathology, most of the patients were in palliative care or in relapse and 42% were due to infectious causes, of which 62% were in induction phase of chemotherapy. Among the 8 patients who died from infections, the following causes were found: 50% neutropenic colitis, 25% bacteremia and 25% necrotizing fasciitis; in 7 (87.5%) patients the microorganism was isolated in blood culture, these were E. coli 43%, Klebsiella spp 43% and Bacillus spp 14%. Gram negative bacilli (GNB) represented 86% of the isolates and 50% were producers of extended spectrum beta-lactamases (ESBL).

Conclusions. Considering that infections are preventable and are among the most important causes of mortality in children with cancer in our hospital, it is essential that infection control teams are developed that apply evidence-based strategies to prevent these infections and thus achieve a reduction in morbidity and mortality, applying programs with training of human resources and equipment to reduce these deaths.

#30: Coronavirus Disease 2019 (COVID-19) Incidence in Pediatric Oncology Patient: Does Routine Screening Affect the Risk for the Transmission in the Hospital

Riyad Adirazin, Nurmelani Sarı, Department of Child health Medicine, Universitas Padjadjaran/ Dr. Hasan Sadikin General Hospital, Bandung, West Java, Indonesia

Background. Cancer patients are at higher risk of COVID-19 infection and more likely they have higher morbidity and mortality than the general population. On the other hand, the oncology patient sometimes can show asymptomatic COVID-19 disease with a risk of longer viral shedding and spreading the infection to others immunosuppressed individuals. Oncology patients also regularly travel between hospital and sometimes lodge in boarding house for routine chemotherapy. As we know, prevention strategy for COVID-19 among pediatric oncology patients can be implemented by minimizing these risks factors for transmission by identifying all patients infected with COVID-19. Here, we report our experience before and after implementing COVID-19 testing policy of patients with hematology and oncology diseases in our center.

Method. We collected data of pediatric oncology patients admitted to Hasdan Sadikin General hospital between July 1st, 2020 to January 8th, 2021. The data consisted of the total number of patients and COVID-19 status by using SARS-CoV-2 Nucleic Acid Amplification Test (NAAT) performed in the patient during two periods. In the first period, we performed NAAT on all oncology patients suspected COVID-19 disease with a risk of longer viral shedding and spreading the infection to others immunosuppressed individuals. Oncology patients also regularly travel between hospital and sometimes lodge in boarding house for routine chemotherapy. As we know, prevention strategy for COVID-19 among pediatric oncology patients can be implemented by minimizing these risks factors for transmission by identifying all patients infected with COVID-19. In the second period, after the policy was changed, NAAT was performed routinely as screening for all oncologic patients admitted to the hospital.

Results. Between July 1st to December 2nd, 2020, the first period, there was 3 positive results from 36 suspected COVID-19 patients among 181 total pediatric oncology patients. In the second period, we performed NAAT on all oncology patients with suspected COVID-19 disease at the time of initial presentation, with the result of 44 patients. In the second period, after the policy was changed, NAAT was performed routinely as screening for all oncologic patients admitted to the hospital.

Conclusion. Routine screening for COVID-19 should be considered as a policy for hospitalization of a pediatric oncology patient because of the high risk that asymptomatic COVID-19 patients can transmit the infection to other patient and to health care workers in the hospital.