

2019

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Sabapathy, Vidhya; Klinkova, Olga; Balbona, Joseph; and Greene, John, "Infectious Complications in Adult Leukemic Patients with Prolonged Neutropenia Undergoing Induction Chemotherapy" (2019). *Internal Medicine Faculty Publications*. 170.

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Conclusion: Stenotrophomonas bloodstream is a serious pathogen and hidden threat among pediatric cancer patients associated with high mortality rate.

Disclosures. All authors: No reported disclosures.

2690. Infectious Complications in Adult Leukemic Patients with Prolonged Neutropenia Undergoing Induction Chemotherapy

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Session: 275. Transplant ID: Malignancy and Neutropenia
Saturday, October 5, 2019: 12:15 PM

Background: Induction chemotherapy in patients with the diagnosis of acute leukemia is associated with a high incidence of infectious complications. While prior studies provide information regarding infectious complications in this patient population, more research is needed to evaluate infection complications in a subgroup of leukemic patients with prolonged neutropenia who often require repeat induction chemotherapy.

Methods: This was a retrospective analysis of 61 patients ages 18–85, between January 1, 2010 and March 14, 2018 who were diagnosed and being treated for acute leukemia. All selected patients experienced severe neutropenia (defined as absolute neutrophil count <500/ μ L) for ≥ 7 days. 33 patients underwent their first induction chemotherapy while 28 patients underwent repeat induction chemotherapy. Patient characteristics and infectious complications were examined. Analysis was performed to further study blood stream infections in this patient population.

Results: Sixty-one patients, mean age of 55 ± 17 , were included in this study. Acute myelogenous leukemia was the most common diagnosis ($n = 47, 77\%$). The average duration of neutropenia in single vs multiple induction group was 40 vs. 47.2 days ($P = 0.38$), respectively. 198 culture-proven infections were identified. Overall, blood-stream infections were the most common site ($n = 78, 39.4\%$), followed by respiratory tract infections ($n = 39, 19.7\%$). Gram-positive organisms were the leading etiology of bacteremias ($n = 50, 64\%$). Bacteremia episodes were more common in the patients undergoing multiple induction chemotherapy comparing to a single treatment (45 vs. 33 episodes). Patients undergoing multiple induction chemotherapy experienced a higher rate of Gram-negative blood stream infection episodes comparing to a single induction group ($n = 18/78, 23.1\%$ vs. $n = 10/78, 12.8\%$).

Conclusion: Overall, bacteremia was the most common infection in this patient population, followed by respiratory tract infections. Gram-positive pathogens were the most common etiology of bacteremia when all patients were analyzed. However, in the subset of patients undergoing multiple induction chemotherapy, Gram-negative pathogens were the leading cause of the blood-stream infections.

Table 1. All patient characteristics included in the study

Characteristic	Number (n)	Percent (%)
Age (years) mean \pm SD	55 \pm 17	
Gender		
Male	34	56%
Female	27	44%
Total	61	
Induction		
Single	33	54%
Multiple	28	46%
Disease		
Acute Myeloid Leukemia	47	77%
Acute Lymphocytic Leukemia	8	13%
Myelodysplastic Syndrome	2	3%
Myeloid Sarcoma	2	3%
Chronic Lymphocytic Leukemia	1	2%
Chronic Myelomonocytic Leukemia	1	2%

Figure 1. Comparison of infectious complications in single induction versus multiple induction chemotherapy groups

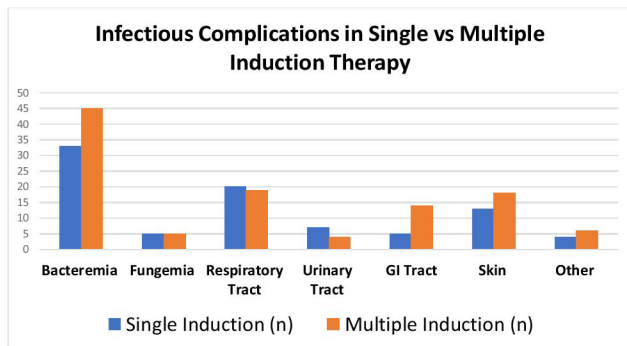
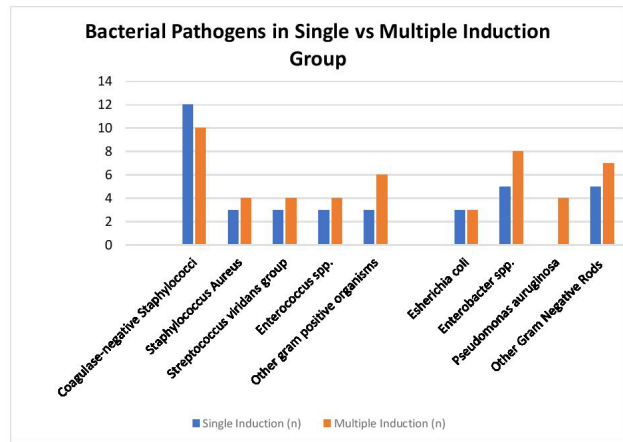


Table 2. Pathogens of bacteremia isolated in patients with bacteremia in single induction versus multiple induction groups

Pathogens of bacteremia	Single Induction Group (n)	Repeat Induction Group(n)
Gram negative pathogens	10	18
Escherichia coli	3	3
ESBL ¹		1
Klebsiella spp.	0	2
Morganella morganii	1	
Enterobacter cloacae	2	3
KPC ²	1	1
Pseudomonas aeruginosa	0	5
Achromobacter xylosoxidans	2	2
Acinetobacter baumannii	1	1
Stenotrophomonas maltophilia	1	1
Serratia marcescens	0	1
Gram positive pathogens	23	27
Streptococcus viridans group	3	4
Granulicatella adiacens	1	0
Rothia spp	0	1
Enterococcus faecium	3	1
VRE ³	2	1
Enterococcus faecalis	0	3
Staphylococcus aureus	3	4
MSSA ⁴	1	1
MRSA ⁵	2	3
Coagulase-negative Staphylococci	12	10
Staphylococcus epidermidis	8	9
Staphylococcus hominis	2	1
Staphylococcus haemolyticus	2	0
Clostridium ramosum	1	
Other	0	4
Streptomyces spp		1
Actinomyces spp		1
Micrococcus spp		1
Brevibacterium spp		1

1. ESBL- Extended-spectrum beta-lactamase
2. KPC- Klebsiella pneumoniae carbapenemase
3. VRE- Vancomycin Resistant Enterococcus
4. MSSA- Methicillin Susceptible Staphylococcus aureus
5. MRSA- Methicillin Resistant Staphylococcus aureus

Figure 2. Comparison of selected bacterial pathogens isolated in single versus multiple induction therapy groups



Disclosures. All authors: No reported disclosures.

2691. Comparison of Incidence and Mortality of Kaposi's Sarcoma Amongst Solid-Organ Transplant Recipients

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Session: 275. Transplant ID: Malignancy and Neutropenia
Saturday, October 5, 2019: 12:15 PM

Background: Kaposi's sarcoma (KS) is a lymphatic endothelium-derived tumor caused by Human Herpes Virus 8 (HHV-8). Organ transplant recipients are at increased risk of this malignancy due to use of immunosuppressive therapy. In this