

## ***Summary and Conclusion***

Candidal infections is a frequent and potentially life threatening complication experienced by critically ill neonates in neonatal intensive care unit. It is a major cause of morbidity and mortality in these patients.

The rate of candidiasis increased markedly in the last decade. Signs and symptoms of these infections are non specific which include temperature instability, respiratory distress, abdominal distension, apnea, bradycardia and lethargy. Therefore clinically difficult to establish a correct diagnosis and treatment.

Our study aimed to highlight on some important risk factors of candidiasis and to show distribution of candidal species among neonates in NICU and to determine antifungal susceptibility pattern of these different candida species.

In our study, 40 neonates who were already positive for candidial infection had surveyed for the risk factors for candidiasis and we found that there is important risk factors that predispose to fungal infections as broad spectrum antibiotics that 100% of patients were received antibiotics, parental hydration 87.5%, parenteral nutrition 75%, prematurity 75%, blood derivatives (62.5%), vaginal birth (92.5%), steroid therapy (55%), mechanical ventilation and endotracheal intubation (42.5%), central intravascular catheter (10%).

Identification of species was done by Germ tube test and chromogenic candida agar. We found that C-Albicans accounted (47.5%) and non albicans accountated (52.5%) which were C,Parpisiolosis (22.5%), C-Tropicalis (12.5%), C-globrata (10%), candida krusi (7.5%). There was

epidemiological shift from *C. albicans* to non albicans specially *C. parapsilosis* which the second common species.

We did antifungal susceptibility tests using E-test, fungitest and disk diffusion test we found that there is emergence of resistance to fluconazole due to emergence of non albicans species over albicans species. But there is good sensitivity to voriconazole, from these species so we can use it in resistant cases and we can use it from the start in some species as *C. krusi*.