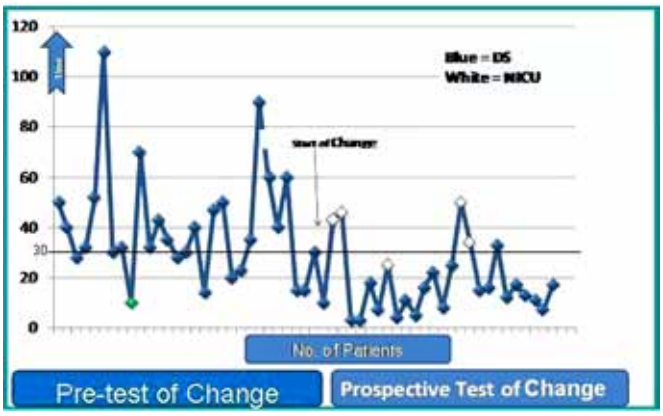
Methods Time: 10/2010- 02/2011

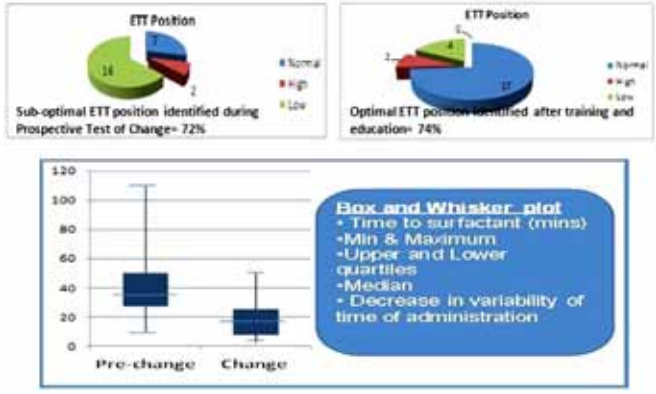
- Babies < 28wks and those at risk of RDS with ETT placement on DS in view of risk to RDS & for surfactant administration

Results

- Change of site of administration was easy
- Shorter Mean time of administration from 39.1 to 12.8 min
- Decrease in variability to time of administration (Standard Deviation decrease from 22.1 to 7.6 min (p<0.0001)
- Identification of sub-optimal ETT position as a safety issue; introduction of evidence-base for ETT position, training, leading to significant improvement.



Abstract 1632 Graph I



Abstract 1632 Graph2

Conclusion

- Use of evidence-based medicine, team training, audit cycle application to improve target outcomes and patient safety.

1633 THE EFFECTS OF SYNBIOTICS ON MORBIDITY AND MORTALITY IN NEWBORNS WITH CYANOTIC CONGENITAL HEART DISEASE: A PROSPECTIVE RANDOMIZED CONTROLLED TRIAL

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Background and Aim In cyanotic congenital heart diseases (CCHD), with the changes in intestinal flora, necrotizing enterocolitis (NEC) and sepsis frequency increases. In this study, the effect of synbiotic use on morbidity and mortality in newborns with CCHD is evaluated.

Methods Fifty-seven newborns with CCHD were randomly assigned to receive either synbiotic [probiotic: *Bifidobacterium lactis,* 5x10 colony forming unit, 30mg+prebiotic: Chicory inulin, 900 mg (1 sachet/day Maflor®, Cidex), n=29] (Group-1) or placebo (n=28) (Group-2). Synbiotic or placebo was started with the first enteral feeding after hospitalization in NICU and continued until the infants were discharged.

Results There was no difference regarding the demographic and clinical features between groups. No difference was stated considering the first enteral feeding age and the time interval to reach full enteral feeding between groups. It was also observed that the duration of mechanical ventilation in Group-1 was shorter (p=0.007). Early and late clinical sepsis rate and late culture proven sepsis were lower in Group-1 (p=0.001). NEC (stage≥2) was significantly higher in Grup-2 (p=0.01). The frequency of increased gastric residuals during enteral feding was less in Group-1 (p=0.001). The mortality rate was significantly lower in Group-1 (p=0.02). In multiple regression analysis it was observed that synbiotic use reduces mortality independently from birth weight, gender and surgical attempt (p=0.01).

Conclusion Introduction of synbiotics with the first enteral feeding in newborns with CCHD after hospitalization in NICU shows a positive effect on morbidity and mortality.

1634 THE EFFECTS OF SYNBIOTIC USE ON MORBIDITY AND MORTALITY IN PREMATURE INFANTS: A PROSPECTIVE RANDOMIZED CONTROLLED TRIAL

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Background and Aim It is previously claimed that probiotic and prebiotic use in premature infants prevents pathogenic bacterial colonization in the intestine and reduces morbidity and mortality. In this study, the effect of synbiotic (probiotic+prebiotic) use on morbidity and mortality in very low birth weight (VLBW) infants is evaluated.

Methods Thirty-four VLBW infants were randomly assigned to receive either synbiotic [probiotic: *Bifidobacterium lactis,* 5x10 colony forming unit, 30mg + prebiotic: Chicory inulin, 900 mg (1 sachet/day Maflor®, Cidex), n=17] (Group-1) or placebo (n=17) (Group-2) from the first enteral feeding and throughout the hospitalization period.

Results There was no significant difference regarding the sociodemographic features between groups. The time interval to reach enteral nutrition to 50 cc/kg/day was similar in both groups, whereas it took shorter time in Group-1 to reach 100/cc/day (p=0.02). Increased gastric residual (former feeding >50%) occurred less in Group-1 (p=0.002). There was no significant difference between groups in the rate of early clinical or culture proven sepsis, however late clinical sepsis rate and late culture proven sepsis in Group-1 was significantly lower (p=0.001, p=0.04). Synbiotic use reduced the risk of sepsis independently from gestational age and gender (p=0.03). Necrotizing enterocolitis (stage≥2) was significantly higher in Group-2 (p=0.001). The rate of bronchopulmonary dysplasia (BPD) and retinopathy of prematurity (ROP) were lower in Group-1 (p=0.04, p=0.03). No difference was identified regarding mortality, actual weight during hospitalization and discharge between groups.

Conclusion Introduction of synbiotics with the first enteral feeding can help to reduce feeding intolerance and morbidity in VLBW infants.

1635 ARE WE ON THE CORRECT FREQUENCY WITH EXTREME PREMATURE BABIES? AUDIT ON VANCOMYCIN DOSE INTERVALS

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