Results

• Oxygen saturation decreased about two hours after dexmedetomidine infusion initiation causing oxygenation instability until approximately six hours after initiation.

• During the period of respiratory instability, the mean oxygen saturation was below goal of greater than 90%.

• Heart rate decreases approximately 8-9 beats per minute following dexmedetomidine infusion initiation and plateaued approximately 30 hours after initiation.

• Blood pressure did not change significantly following dexmedetomidine infusion initiation.

Discussion

• Oxygen saturation decreased about two hours after dexmedetomidine infusion initiation causing oxygenation instability until approximately six hours after initiation.

• During the period of respiratory instability, the mean oxygen saturation was below goal of greater than 90%.

• Heart rate decreases approximately 8-9 beats per minute following dexmedetomidine infusion initiation and plateaued approximately 30 hours after initiation.

• Blood pressure did not change significantly following dexmedetomidine infusion initiation.

Conclusion

• Dexmedetomidine is becoming a popular pharmacological treatment in neonates, especially for sedation during mechanical ventilation.

• Oxygen saturation should be monitored closely especially during the first eight hours following dexmedetomidine infusion initiation.

• Cardiovascular status remained relatively stable.

• Limited data regarding use of dexmedetomidine in neonates shows the continued need for more research.

Disclosure

• All authors of this presentation have nothing to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation.