Reducing Hypoglycemic Episodes

Shawn Dildine, BSN, RN, CNIII

Statement of Practice Problem
An increased rate of hypoglycemia episodes within our patient population of chronic kidney disease and geriatric patients. Chart reviews identified that hypoglycemic episodes were related to administration of sliding scale insulin before meals in conjunction with the established time frame of glucose monitoring. The established time for glucose monitoring and sliding scale coverage is 7am 11am 5pm and 9pm. It was also noted that there was unpredictability with delivery of meals with inconsistent times and with no notification of delivery. After analysis of one month’s data collection it was noted that 49% of the total glucoses recorded were hypoglycemic with a glucose less than or equal to 70.

Research/Research Utilization Approach
A literature review regarding glycemic control and administration of sliding scale insulin was completed. There was follow-up and planning with the dietary department to review the current unpredictability of tray delivery. There was a unit education to staff regarding administration of sliding scale coverage to coincide with meal delivery.

Analysis/Interpretation of Data
Literature showed that the hospitalized diabetic patient who experienced hypoglycemic episodes was at risk for increased length of stay and also increased incidence of mortality. Further noted that patients at an increased risk for hypoglycemic episodes were the geriatric patient with diabetes and the diabetic patient with chronic kidney disease. It was recommended that insulin given 15 to 30 minutes prior to meals reduced the post prandial blood glucose increment without risk of hypoglycaemia.

Impact on Quality of Care
There has been decreased incidence of hypoglycemic episodes within our patient population. Our incidence of hypoglycemic events has reduced to 29% from 49% since our practice change. This process promotes improved glucose management for our patient population. This is an on going Process Improvement (PI) project that continues monthly.

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