

MANDATORY INSULIN EDUCATION

at

The Valley Hospital (TVH)

for

Nursing Students/Nursing Instructors

2012

Insulin Safety

Subject - Insulin Safety

Background

Insulin known to be high risk medication

Can promote serious hypoglycemia if given
incorrectly

Assessment

5 “RIGHTS” of administration **MUST** be followed

Recommendation

All student nurses will observe this presentation
and successfully complete the post-test

Insulin Safety (cont.)

All nursing students administering insulin will have their clinical instructor

OR

the patient's primary nurse double check dose, time and type of insulin to be given

TYPES OF INSULIN AT TVH

HUMALOG (Insulin lispro) Rapid Acting

- Inject within 15 minutes before meals or immediately after meals

Humulin R (Regular Insulin) Short Acting

- Inject within 30 – 60 minutes before meals

Humulin N (NPH Insulin) Intermediate

- Administer as per health care provider order

Types of Insulin (cont.)

Levemir (Insulin detimir) Long Acting

- Administer once or twice daily

Lantus (Insulin glargine) Long Acting

- Administer once or twice daily – if given once per day, usually given at bedtime

Novolin Mix 70/30

- 70% NPH and 30% Regular

Novolog Mix 70/30

- 70% NPH and 30% Novolog

Joint Commission States “Insulin will not be borrowed or shared”

EACH patient will receive his OWN vial of insulin from pharmacy

- write date on label when first opened
- keep vial in marked insulin bin in medication room when not being used
- discard in sharps container upon pt. discharge
- do NOT share vials
- may return to pharmacy if unopened upon discharge

At TVH, only Safety Glide Insulin Syringes are used

- ▣ Insulin syringes are always 100 unit per ml
- ▣ Can come in three sizes – 30 unit
50 unit
100 unit

All insulin doses to be administered via subcutaneous route at 90 degree angle

Under unique circumstance, regular insulin can be given IV

OTHER FORMS OF INSULIN DELIVERY

- ▣ While insulin pens are popular for home use – easy to use and carry

They are NOT to be used at TVH for adults. If patient brings their own pen and insists on using, it must be sent to pharmacy for identification and only patient self medicates

ONLY pediatric inpatients may use insulin pens with supervision for education purposes

When to request a Diabetes Education Consult???

Any patient admitted with hypo/hyperglycemia

DKA diagnosis

New Diabetes diagnosis – Primary or Secondary

Need for glucometer and instruction

New to insulin

Pt/Family request

Nurse assessment identifies education need

Ask primary RN to submit diabetes education consult if not already done.

For Diabetes Dietary Instruction

Please

Ask primary RN to submit dietary consult request

ACCU-CHEK INFORM SYSTEM

- ▣ Pre-meal Accu-Chek glucose readings should be taken **NO** More than 30 minutes prior to meal and insulin administration
- ▣ Download glucometer immediately after glucose obtained
- ▣ **NOTE:** if meter is **NOT** returned to base for download within 1 hour, meter will not allow operator to use. Meter **MUST** be returned to base

Accu-Chek Inform (cont.)

- ▣ Critical Results identified by glucometer
 - Above 400
 - Under 50

These results are reportable and require a venous blood draw to confirm. Treat any glucose reading of 70 mg/dl as hypoglycemia whether patient is symptomatic or not

American Diabetes Association (ADA) DIABETES INPATIENT BLOOD GLUCOSE TARGETS

- ▣ For critically ill patient in ICU
 - maintain glucose level between 140 mg/dl and 180 mg/dl
 - lower glucose targets may be appropriate in selected patients BUT targets below 110 mg/dl not recommended
 - use continuous insulin infusion to maintain this control

ADA Glucose Recommendations (cont.)

- ▣ For NON critically ill medical surgical patients
- ▣ Pre-meal glucose target should generally be less than 140 mg/dl
- ▣ Random level less than 180 mg/dl

HYPOGLYCEMIA

- ▣ As per the ADA

Any glucose less than 70mg/dl, with or without symptoms MUST be treated with 15 grams carbohydrate (ex: 4 ounces fruit juice – apple juice if renal patient)

Recheck accu-chek again in 15 minutes. If glucose remains low, retreat and check again in 15 minutes ETC.....

RULE OF 15'S

IF PATIENT UNRESPONSIVE, contact Rapid Response Team at in-house beeper #50-0776

INSULIN PUMP

- ▣ If patient is admitted with own Insulin Pump
- ▣ Refer to Patient Care Services (PCS) Policy #44.61
- ▣ Submit Diabetes Education Consultation
- ▣ Patient **MUST** be able to maintain **COMPLETE** control
 - provide all supplies
 - change insertion site every 3 days
 - complete and sign agreement form and daily flow sheet

INSULIN PUMP (cont.)

If there are any concerns over a patient's ability to manage their insulin pump, contact a Diabetes Educator: In-house beeper #50-0664

If educator not available, call health care provider about removing insulin pump and obtain subcutaneous insulin orders

▣ Thank you for your attention.

▣ Please complete the post-test. Passing score is 100%.