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BACKGROUND

- ❑ The development of protocols for the treatment of pathologies that require close monitoring, such as diabetic ketoacidosis (DKA), in the Electronic Clinical History (ECH) can mean greater safety for patients

PURPOSE

- ❑ Describe the development of a protocol for the management of DKA for patients attended in the Emergency Room

MATERIAL AND METHODS

- ❑ Descriptive study
- ❑ Developed by the **Emergency Pharmacy Specialist** into the ECH(Selene®)
- ❑ The most current DKA clinical practice guidelines were reviewed, to establish:
 - ✓ **Insulin and Potassium therapy**
 - ✓ **Transition to subcutaneous insulin**
 - ✓ **Rate of therapy administration**
 - ✓ **When to measure blood glucose and potassemia**
- ❑ Commercial dilute potassium solutions (concentration <40mEq/L) were used following the recommendations of the Ministry of Health and Social Policy (published in 2009)

RESULTS

- ❑ The protocol was integrated into the ECH program
- ❑ Two subsections were created:

• Fluid-potassium

- ✓ K⁺>5,5: SF 0,9%
- ✓ K⁺(3,3-4,5):20mEqCLK/500mL SF 0,9%
- ✓ K⁺(4,6-5,5):10mEqCLK/500mL SF 0,9%
- ✓ K⁺<3,3:20mEq/500mL SF 0,9% each hour.

- Each prescribing line had associated information on the rate of administration:

- ✓ 1st hour: 1000mL
- ✓ 2nd-3rd hour:500mL/h
- ✓ 4th-5th-6th-7th hour: 250mL/h
- ✓ Then: 150mL/h

• Insulin Therapy

- ✓ PC IV insulin
- ✓ SC insulin
- ✓ Decrease in a half PC insulin if glucose <250mg/dL and ketonemia >0,6mmol/L
- ✓ Record the time of onset of basal insulin administration SC
- ✓ Suspend the insulin PC 1hour after the administration of basal insulin SC
- ✓ Notify the doctor when blood glucose <250mg/dL and ketonemia <0.6mmol/L

CONCLUSIONS

- ❑ This protocol **has facilitated prescriptions in HCE, has decreased associated errors in prescribing medication, has guaranteed safety in the administration of treatment**

REFERENCES

1. Joint British Diabetes Societies. 2 American Diabetes Association 3. Spanish Society of Emergency Medicine Diabetes
4. <http://www.ismp-espana.org/documentos/view/54>