Addison'sDiseaseMedication

1. Write out the order including the pharmaceutical agent, dose, route and when it should be given.

Hydrocortisone 100mg IV q 8hrs until the patient is stable. The dose should then be gradually reduced, achieving maintenance dosage within 5 days (Katzung & Vanderah, 2021). In addition, fluids should be ordered, normal saline 0.9% 1L bolus over 1 hour to correct her hypotension, tachycardia, and hyponatremia (Nowotny et al., 2021).

2. Justify the rationale on why this medication was selected in this particular situation.

Because acute adrenocortical insufficiency is suspected, replacement therapy must be implemented immediately. The treatment for Addison's crisis is parenteral corticosteroids. After initial treatment and when the total hydrocortisone dosage has been reduced to less than 50 mg/d, a salt-retaining hormone should be prescribed, such as fludrocortisone, as well as oral hydrocortisone, 20-30mg QD (Katzung & Vanderah, 2021).

3. Discuss the class/schedule of medication chosen.

Hydrocortisone is a short to medium-acting glucocorticoid. It's similar to the metabolism of naturally occurring adrenal steroids, however, it differs in that alterations in the glucocorticoid molecule influence its affinity for glucocorticoid and mineralocorticoid receptors as well as its protein binding affinity, side chain stability, rate of elimination, and metabolic products (Katzung & Vanderah, 2021).

4. Discuss the pharmacodynamic action of the med.

Synthetic steroids have similar actions to those of cortisol, and in Addison's disease, there is a deficiency of the adrenocortical hormones; the major glucocorticoid being cortisol. More specifically, synthetic steroids bind to the specific intracellular receptor proteins and produce the same effects but have different rations of glucocorticoid to mineralocorticoid potency (Katzung & Vanderah, 2021).

SideEffects/AdverseReactions/Interactions

1. **Discuss the potential side effects and/or adverse drug reactions for the first line treatment in THIS patient (not generically).** Because hydrocortisone has mineralocorticoid effects, in addition to glucocorticoid effects, sodium and fluid retention and loss of potassium occurs. This patient has normal cardiovascular and renal function and therefore, hydrocortisone can lead to hypokalemic and hypochloremic alkalosis (Katzung & Vanderah, 2021).

2. Discuss reasons/indications why not to give this medication in THIS patient.

My concern with this patient is that she was recently diagnosed with gastritis, and hydrocortisone can cause acute peptic ulcers. In addition, administration of glucocorticoids can cause nausea,