blood.

**Syndrome of Inappropriate Antidiuretic Hormone (SIADH)**

**Pathophysiology** - excessive secretion of antidiuretic hormone from the pituitary gland despite low serum osmolarity level.

**Desired Outcome** - an increased amount of urine output; SIADH is accompanied by low urine output and low serum osmolality. Loss of fluid from the vascular tree will thicken the serum, so serum osmolality will increase.

**Clinical Manifestations** - cannot excrete dilute urine, retain fluids, develop sodium deficiency, fluid overload (tachycardia, crackles in lungs, distended neck veins)


**Pheochromocytoma**

**Sickle Cell Anemia**

**Pathophysiology** - Hereditary disease, destroys red blood cells by causing them to become rigid and "sickle shaped. Common in African descent. When RBC release oxygen to tissue and O2 concentration is reduced, red cells become rigid and become sickled. As re-oxygenated, sickle-shaped cells become clogged in small blood vessels causing obstruction of circulation -> cause tissue damage

- **Etiology** - single genetic mutation of hemoglobin molecule. Inheritance of mutated gene, from both parents results in disease, person who inherits from one parent is carrier. NO CURE

**Desired Outcome** - manage pain of SC crisis, promote optimal perfusion and prevention of complications.

**Clinical Manifestations**

- **Subjective Data** - fatigue, pain crisis all over, shortness of breath, chest pain, irritability

- **Objective Data** - swelling of hands/feet, fever, jaundice, cyanosis, presence of sickled cells on histologic exam

**Nursing Interventions & Rationale**

- I: Assess respiratory status. R: during crisis, RBC cannot effectively deliver oxygen to tissues resulting in poor perfusion.

- I: Monitor cardiac status. Perform 12-lead ECG. R: Changes in respiratory status and hypoxia may lead to arrhythmias.

- I: Assess for and manage pain. Administer meds and apply warm compress. R: poor perfusion results in damage to tissues and organs which cause intense throbbing pain. Avoid using cold compresses as cold causes further vasoconstriction and exacerbates pain and crisis. Warm will dilate vessels to promote circulation.

**Leukemia**