

**Nursing Process Focus:
Patients Receiving Calcium Gluconate**

<p>Assessment Prior to administration:</p> <ul style="list-style-type: none"> • Obtain complete health history including allergies, drug history and possible drug interactions. • Obtain a baseline ECG • Obtain baseline vital signs, especially apical pulse for rate and rhythm, and blood pressure • Obtain lab work to include complete blood count and electrolytes, esp. calcium • Assess for side effects of medications, i.e., nausea, vomiting, and constipation 	<p>Potential Nursing Diagnoses</p> <ul style="list-style-type: none"> *Risk for Injury, related to softening bones and side effects of drug *Deficient Knowledge, related to drug's effects and side effects
<p>Planning: Patient Goals & Expected Outcomes</p>	
<p>Patient will</p> <ul style="list-style-type: none"> • Have normal serum calcium levels (8.5 – 11.5 mg/dL) • Demonstrate an understanding of the drug's action by accurately describing drug side effects and precautions, and measures to take to decrease any side effects • Immediately report side effects and adverse reactions 	
<p>Implementation</p>	
<p>Interventions and (Rationales)</p>	<p>Patient Education & Discharge Planning</p>
<p>*Monitor electrolytes throughout therapy. (Calcium and phosphorus levels tend to vary inversely. Low magnesium levels tend to coexist with low calcium levels Normal calcium levels are usually set at 8.5 - 11.5 mg/dL)</p>	<p>*Advise patient of importance of routine lab studies, so any deviations from normal can be noted and corrected immediately</p>
<p>*Monitor for signs and symptoms of hypercalcemia</p>	<p>*Instruct patient to report the following signs or symptoms of hypercalcemia: drowsiness, lethargy, weakness, headache, anorexia, nausea and vomiting, increased urination, and thirst</p>
<p>*Initiate seizure precautions (padded rails, suction)for patients at risk for hypocalcemia,</p>	<p>*Teach patient to be aware of signs of hypocalcemia, such as seizures muscle spasms, facial twitching, paresthesias</p>
<p>*Monitor for musculoskeletal difficulties. (Calcium gluconate is used to treat osteoporosis, rickets, osteomalacia.)</p>	<p>Instruct patient to:</p> <ul style="list-style-type: none"> * take special precautions to prevent fractures, including pathologic fractures. * report any episodes of sudden pain, joints out of alignment, inability of patient to assume normal positioning
<p>*Monitor intake and output. Use cautiously in patient with renal insufficiency</p>	<p>Instruct patient to</p> <ul style="list-style-type: none"> *report any difficulty in urination *measure I&O
<p>*Monitor cardiac functioning. Possible side effects may include short QT wave, heart block, hypotension, dysrhythmia or cardiac arrest with IV administration.</p>	<p>*Inform patient to recognize and report side effects to health care provider</p>
<p>*Ensure that medication is taken/administered correctly</p>	<p>*Inform patients that oral calcium supplements should be taken with meals or within an hour</p>

	following meals
*Monitor IV site (intravenous administration) for infiltration. Extravasation may lead to necrosis.	*Instruct patient to report any pain at IV site
*Monitor diet. (Consuming calcium-rich foods will increase effect of drug. Consuming foods rich in zinc may decrease calcium absorption.)	Advise patient to: *consume calcium-rich foods *avoid zinc-rich foods
Evaluation of Outcome Criteria	
Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”)	