

### Medication Names

**Prototype Med** calcitonin-salmon (Miacalcin, Calcimar)

**Drug Class:** Hypocalcemic

**Action:** decrease bone resorption, inhibits the action of osteoclasts and increases excretion of calcium

### Therapeutic Use

Treatment of postmenopausal osteoporosis

Hypercalcemia secondary to hyperparathyroidism

Paget's disease

### Adverse Effects

Nasal dryness and irritation with intranasal calcitonin

Hypersensitivity reactions/ anaphylaxis

Hypocalcemia

Decrease in therapeutic effects over time

Nasal form of calcitonin may cause nasal dryness and irritation as well as headaches and epistaxis

Injectable form may cause injection site reaction, nausea and vomiting and polyuria.

### Nursing Interventions

When administering intranasal calcitonin

Alternate nostril used daily.

Assess prior to administration for irritation/ulceration.

Prior to beginning therapy

Perform intradermal allergy test.

Development of erythema within 15 minutes indicates sensitivity.

Have epinephrine 1:1000, antihistamines, and oxygen available during early therapy

Monitor for hypocalcemia (serum calcium level, muscle spasms, tingling of fingers and toes).

Provide diet high in calcium and vitamin D.

### Administration

Intranasal spray

Hold nasal pump upright.

If using pump for the first time, prime pump according to manufacturer's instructions.

Spray once in nostril opposite of previous instillation

### Administration (cont)

Intramuscular/Subcutaneous

Rotate injection sites.

Subcutaneous is preferred route - Administer IM if dose more than 2 ml

Protect from light.

Keep calcitonin salmon refrigerated.

### Patient Education

For intranasal calcitonin, instruct clients to

Alternate nostril used daily.

Report nasal irritation or bleeding.

Instruct clients to immediately notify provider if rash or itching occurs.

Instruct clients to do the following for 30 minutes after taking drug: report changes in swallowing or vision to provider

Notify provider of muscle spasms, tingling of fingers and toes.

Eat a diet high in calcium and vitamin D.

Monitor for loss of effect after a year or more of use through regular bone density studies

### Contraindications

Allergy to salmon

Prior treatment with bisphosphonates

Pregnancy and lactation

### Precautions

Safety not established in pediatric clients

### Interactions

May decrease serum lithium levels.

Previous treatment with bisphosphonates may decrease the response to calcitonin.