

Calgonate (Calcium Gluconate 2.5%)– 20.075

CLASS: A

PROTOCOL(S) USED IN: HAZMAT Hydrogen Fluoride

PHARMACOLOGY AND ACTIONS: In the setting of hydrofluoric acid burns, calcium gluconate topically applied to affected skin will allow for calcium to bind up the free fluoride ions, reducing pain caused by such ions. Binding the free fluoride ions reduces their impacts, specifically those associated with causing hyperkalemia, hypocalcemia, and hypomagnesemia.

INDICATIONS:

- A. Hydrofluoric acid exposure to the skin.

CONTRAINDICATIONS:

Known Hypersensitivity

SIDE EFFECTS AND NOTES:

- A. Pharmacokinetics: Absorption transdermally, with onset of action within several minutes and duration of action up to several hours.
- B. To monitor pain relief from calcium gluconate gel absorption, paramedics should avoid concurrent administration of opiate/narcotic medications. When hand(s) are involved, a best practice is to place a liberal amount of the calcium gluconate gel in exam glove(s), placing the gel in the spaces for any affected fingers too, and then pulling the glove(s) onto the affected hand(s). Weaker concentrations of hydrofluoric acid may result in time lag of several hours from exposure to onset of burn pain. High concentrations of hydrofluoric acid will cause immediate burn pain.

ADULT DOSING:

Hydrogen Fluoride Exposure:

For skin exposure-

Apply topically to exposed /affected burn on skin

PEDIATRIC DOSING:

Hydrogen Fluoride Exposure:

For skin exposure- Apply topically to exposed/affected burn on skin

Apply topically to exposed /affected burn on skin