

Hydrofluoric Acid

Caution!

To Triage Nurse

This person was exposed to
Hydrofluoric Acid!

Do not treat as a simple chemical
burn!

The patient should be treated as
CTAS 2.

See enclosed note from Dr. H. Ovens.

To Treating Nurse/Physician

Protect yourself and your staff!
Do not touch the victim with your
bare hands!

Do not use regular gloves!
Wear gloves enclosed in this
envelope.

See inside the envelope for treatment
reference.

Refer to Mt. Sinai Hospital ER
protocol.

HYDROFLUORIC ACID (HF)

General Info

- HF is a very toxic and corrosive acid
- HF quickly penetrates tissues resulting in burns that require specialized treatment
- Cardiac symptoms can be delayed up to 24 hours after skin exposures
- Exposure of less than 10% of the body to HF can be fatal
- In high concentration can lead to systemic toxicity
- Can cause hypocalcemia, cardiac arrhythmias, metabolic imbalances, pulmonary edema
- Patient requires ECG and cardiac monitor

Caution: Wear nitrile gloves when touching the patient or removing their clothing!

Medical Treatment Summary

Skin Burns		Eye Exposure	Inhalation		Ingestion
Concentrated HF	Dilute HF	All HF	Concentrated HF	Dilute HF	All HF
<ul style="list-style-type: none"> • Debride (if necessary) • Calcium Gluconate 2.5% Gel • Calcium Gluconate 5% Injection locally • Observe for/treat Systemic Effects (especially if > 25 sq. in.) • Monitor for development of hypocalcemia 	<ul style="list-style-type: none"> • Debride (if necessary) • Calcium Gluconate 2.5% Gel • Calcium Gluconate 5% Injection (if necessary) 	<ul style="list-style-type: none"> • Water Wash or Saline Wash • Topical Tetracaine Hydrochloride • 1% Calcium Gluconate Irrigation 	<ul style="list-style-type: none"> • Oxygen and 2.5% Calcium Gluconate by Nebulizer • Observe • Prophylactic Inhalation Steroids • Treat (if necessary) Bronchoconstriction, Pulmonary Edema, Systemic Effect 	<ul style="list-style-type: none"> • Oxygen and 2.5% Calcium Gluconate by Nebulizer (if necessary) • Observe 	<ul style="list-style-type: none"> • Lavage with Calcium Gluconate • Treat Systemic Effects