Therapeutic induced hypothermia (TIH) is a procedure where a patient's body temperature is intentionally lowered to protect them from injury after certain events, most often cardiac arrest.

Indications:

1. Return of spontaneous circulation after non-traumatic cardiac arrest. The patient must fulfill the following criteria:
    a. Age > 18
    b. Unconscious
    c. Initial temperature > 34C (93F)
    d. ET or King tube in place
    e. Patient is not pregnant

Procedure:

1. Patient should have 2 IV lines placed, preferably large bore and proximal (AC or EJ). Due to their distal nature an difficulty flowing large volumes, IOs should only be used as a last resort.
2. Remove clothing.
3. Apply cold packs to axilla and groin.
4. Infuse a cold saline (not lower than 4C/39F) bolus of 40ml/kg, maximum of 2 liters.
5. Medications:
    a. If the patient is shivering, diazepam 0.2mg/kg up to 10mg
    b. For systolic blood pressure of less than 100, administer dopamine infusion to maintain a pressure of 100 to 150 systolic.

Notes:

1. Cold fluids can cause hypotension and bradycardia. Be ready to use dopamine for hypotension, but do not use atropine to treat bradycardia.
2. If the patient re-arrests, discontinue cooling and follow the Cardiac Arrest protocol.
3. If cold saline is unavailable, TIH can be started using cold packs at the axilla and groin.