

Edema reduction :- Cryotherapy limits the formation of edema by reducing the cell metabolism.

The subsequent vasoconstriction decreases the permeability of capillaries and the reduced blood flow decreases the intravascular pressure.

Both events prevent the fluid from escaping into the tissues. The mechanism of compression, elevation, active muscle contraction and muscle milking (electrical muscle contraction) must be incorporated into treatment plan to reduce edema.

Spasticity :- Several theories have been suggested.

Many authors say that due to reduced velocity of nerve conduction and displays sensitivity of receptors such as muscle spindles, these structures are deeply situated, requires several minutes of cold application.

It is clinically seen that spasticity reduces within 30 ^{seconds} min of ice application.

This suggests that skin stimulus produced by cold must have an affect ^{on the} level of excitation and inhibition in the region of anterior horn cells.