

" Contrast Bath "

Contrast Bath consist of ^{alternating} ~~hot~~ ^{heat} & cold treatment
Allena produces a kind of
Vascular exercise causing a cycle of vasoconstriction
& vasodilation of superficial blood vessels

Physiological effects:-

- 1) The primary effects of alternate periods of vasoconstriction & vasodilation, this pumping action improve the peripheral blood flow, ↓ se pain & may help in venous & lymphatic return.
- 2) Sensory Stimulation - Such treatment will cause considerable sensory stimulation as the cutaneous hot & cold receptors are alternatively activated. This stimulation is relatively vigorous because each time neural accommodation starts to occur as the temperature stimulation is reversed.
- 3) Pain - The strong sensory stimulation ↓ se pain by means of gate mechanism. This is also marked sedative effects helps in reducing the pain.
- 4) Temperature Range - For cold immersion $10-15^{\circ}\text{C}$ temp. This temp is used as the proportion of body area immersed ↑ se. For hot immersion $40-44^{\circ}\text{C}$ temp. This temp is used as the proportion of body area treated ↑ se.

Treatment Duration:-

The most commonly used ratio are 3:1 & 4:1
i.e., 3 & 4 min in the hot immersion & 1 min
cold immersion. This cycle is repeated 3-4 times
so that the whole treatment last for 15-25 min.

Indications :-

- 1) Oedema Reduction.
- 2) Impaired Circulation.
- 3) Pain Reduction.
- 4) ~~The~~ Using the ROM.
- 5) Subacute or chronic Inflammatory condⁿs.
(Plantar fasciitis)

Contraindications:-

- 1) Acute Injury
- 2) Hypersensitivity to Cold.
- 3) Peripheral vascular Diseases.
- 4) Contraindications relative to cold application & Contraindications relative to hot application.

→ Methods of Treatment / Application :-

- 1) The effects & uses of treatment should be explained to the patient. The skin sensitivity & any Contraindication should be checked before the application.
- 2) Two suitable sized baths are seen with hot water at $40 - 44^{\circ}\text{C}$ & cold water at $10 - 15^{\circ}\text{C}$
- 3) It is usual to start & finish with immersion in the hot water. but in subacute condⁿ it is generally beneficial to finish the treatment following cold exposure & in chronic condition finish the treatment with hot exposure.
- 4) Place the limb in hot water for 3-4 min immediately afterward place the limb in cold water for 1 min. Repeat the cycle for 3-4 times; maintain the hot & cold water at a constant Temp.