

use with a non-corrosive antiseptic solution.

Methods of Application:

i) Direct contact application:

If the surface that be treated is fairly regular then a coupling medium is applied to the skin surface in order to eliminate air between skin and treatment head and to transmit ultrasound in the tissue.

The treatment head is moved in small concentric circle over the skin in order to avoid concentration at any one point.

ii) Water Bath application:

When direct contact is not possible because of the irregular shape of the or because of the tenderness, a water bath may be used.

This can only be applied to hand, forearm, foot and ankle.

The patient is seated and the part is put in water at comfortable temperature. In such a position that it is suitably supported.

The treatment head is placed in the water and moved parallel or concentric to the

surface of the part which is being treated and as close to the skin as possible or 1 cm from the skin.

If degassed water produced by boiling the water and then cooling it is used, no bubbles formed.

iii) Water Bag Application :-

On irregular surfaces which cannot be conveniently placed in water bath, a plastic or rubber bag filled with degassed water forming a water cushion between the treatment head and skin can be used.

The water bag could be ordinary rubber balloon.

A coupling medium has to be placed both between the rubber bag and skin and between the rubber bag and the treatment head to eliminate the air.

This is somewhat slippery bag then allow the treatment bag to be moved over it.

iv) Solid sterile gel as couplant :-

US treatment cannot be given over the open wound or injured skin, because there is risk of transmitting infection and the moving treatment

head may cause further damage.

To solve this problem polyacrylamide agar gel in 3-3 mm sheet can be used as a couplant.

A flexible sheet cut to an appropriate size is placed over the open wound with a little sterile saline to ensure that there are no air bubbles between the gel and the new surface of the gel sheet will allow the treatment head to move smoothly over it.