

WARTS

Warts come in many shapes, sizes and variations. Common warts are usually quite harmless, but sometimes may be painful depending on the location. Most folks want warts removed because of the cosmetic appearance. Warts are resistant to all forms of therapy. The best outcomes for any treatment regimen are around 60-70% including cryosurgery. Freezing a wart is just like freezing any other lesion except that you always use the largest pen tip (10mm). After the initial freeze, a repeat freeze of the wart will improve the success rate. Repeat freezes can be tried when the last freeze heals, which takes about 2-3 weeks between freezes. The wart is a viral infection. It survives by being rather benign, causing minimal insult to the inflammatory system so as to not be noted by the body as a foreign invader. Once the body identifies a wart as foreign and develops antibodies to it then the immune system can go after other warts. Therefore, if you successfully treat one wart on someone who has multiple warts it may happen that the remainder of the warts are quickly removed by the body's defenses. The visible part of a wart is really just the dead tissue and debris built up on top of the infection. The actual viral load is on the underside of the visible wart. Therefore, to remove the infection it is necessary to freeze directly below the wart. This requires freezing either through the wart, which is irregular and doesn't transfer heat well, or to freeze around the wart and allow the freeze to come in from the outside perimeter of the lesion. There are two ways to overcome the problem of getting under the wart. First, be sure the wart is as flat as possible before attempting to freeze. This may be accomplished either by using over the counter wart preparations which are really just mild acid solutions to help dissolve the wart material down to a flatter surface at the skin level. The other way to reduce the size of the wart is to shave off the wart with a scalpel to get it as low and flat as possible. Next, always use the largest tip size. The larger the freeze zone, the more likely it is to affect the underside of the wart.

So when freezing a wart there are two basic ways to successfully remove the wart. One is to develop a blister and then the wart will sluff off with the dead skin on top of the cryolesion. The other is to cause enough tissue damage and inflammation that when the body's defenses come in to clean up the damage it sees the wart as a foreign entity and then attacks the wart. When this happens antibodies are formed and these will sometimes go attack any other warts that are in other places on the body. Always use the largest tip size available no matter how large the lesion. This will allow for the most effective freeze. Also, freeze from 45 to 60 seconds depending on the skin type and location of the wart. Remember that the longer the freeze the longer the recovery time. Using a freeze-thaw-freeze cycle (with a 5 minute thaw) may also increase successful removal.

Bullets

---two ways to remove the wart –

(1) one is to form a blister and the wart will sluff off with the dead skin
(2) second is to cause enough inflammation so the immune system may come in and see the wart as a foreign intruder.

- debulk wart prior to freezing - dissolve with otc wart meds or shave with scalpel
- largest tip (10mm) no matter size of wart
- freeze 45 to 60 seconds depending on skin type and location
- freeze-thaw-freeze cycle
- refreeze if needed - first freeze should heal in 2 to 3 weeks