



# Cryosurgery of warts



**CryolQ**



## **What is CryoIQ?**

The CryoIQ is a highly portable, simple and effective handheld cryosurgery device for accurate treatment of benign skin lesions, making it ideal for general practice, dermatology, podiatry and minor surgery applications.

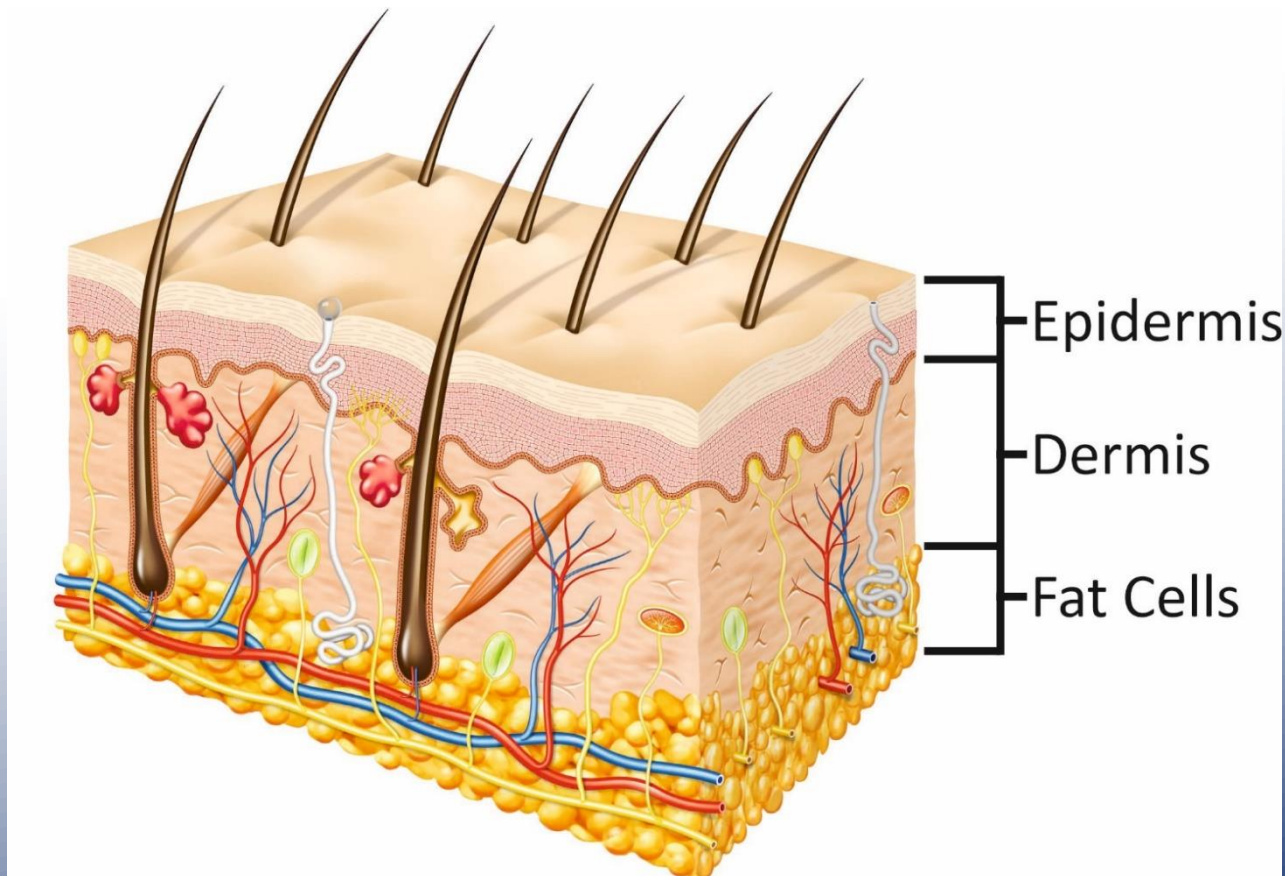
## **Safety advantages**

- No need to handle dangerous cryogenic gases or liquids
- Incorporates a new and improved safety design which allows easy on/off fitting of the cartridge
- Two internal filters prevent sediment build up
- Sterilisable tips
- The device can be safely kept in a drawer ready for use at any time

# **Freezing Techniques**

**Simple procedure (foot wart)**

**Dermatologic Cryosurgery is treating lesions in the Epidermis, which only extends down a few millimeters**





## **Effective Cryo Necrosis from -25°C to -30°C (-13°F to -22°F)**

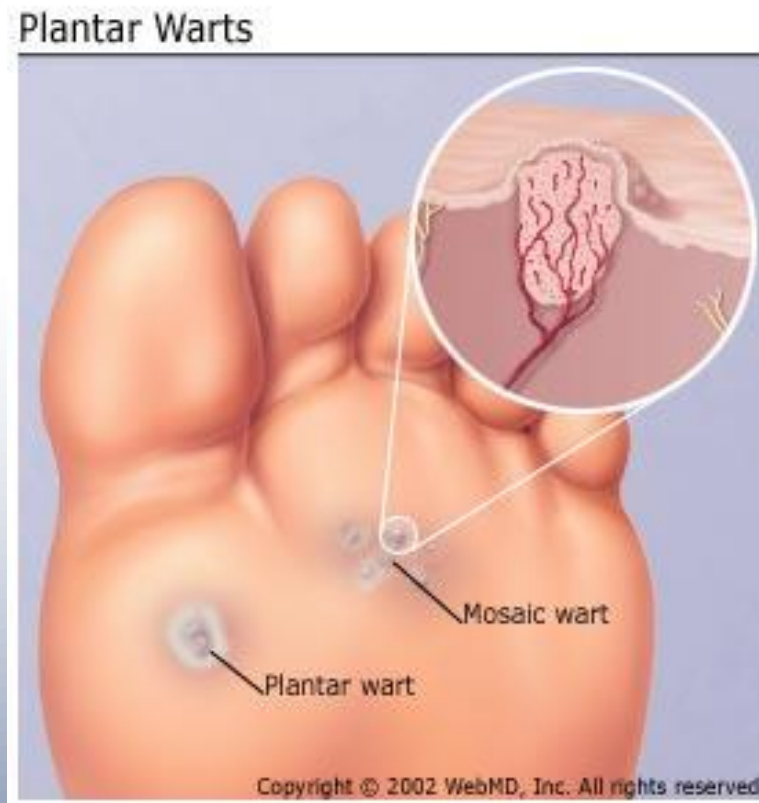
To be able to treat lesions such as warts, you need a rapid freezing to -25°C to -30°C.

This temperatures will be rapidly reached with CryoIQ devices.

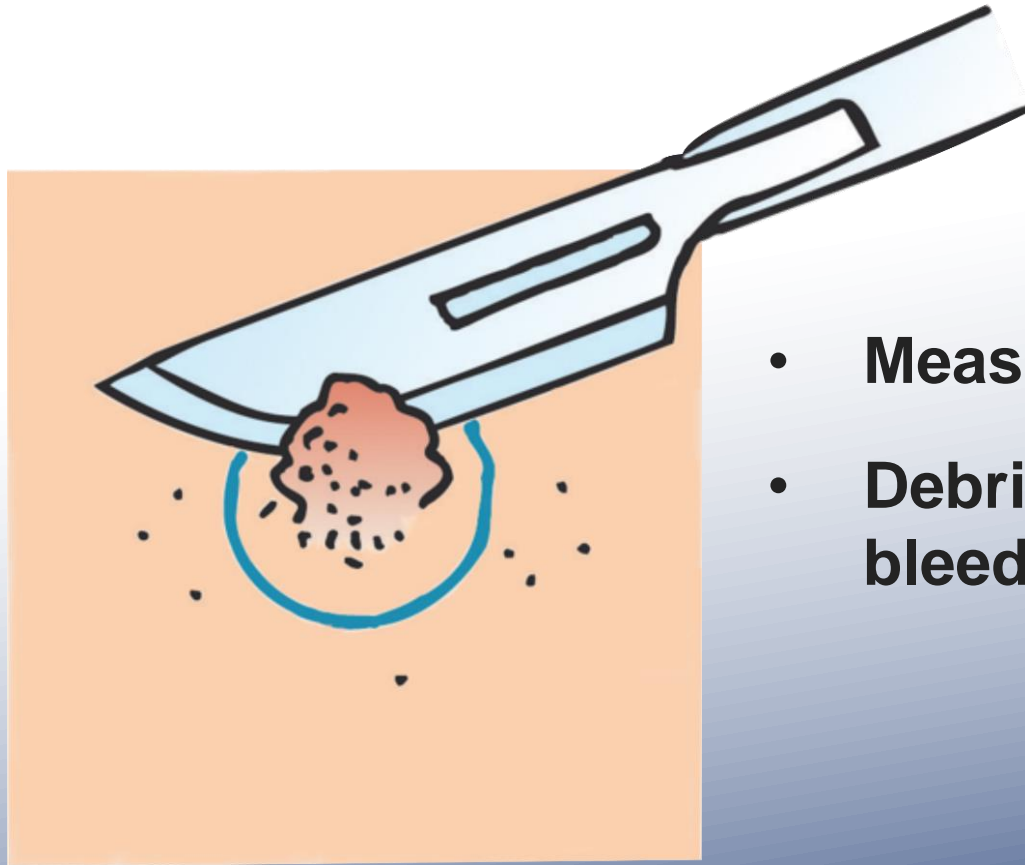
Rapid freezing to these temperatures will produce cryo necrosis in all benign human tissues. Cryo necrosis leads to cell death that destroys unwanted lesions such as warts.



**Remember, you treat the tip  
of an iceberg ☺**



## Before Freezing



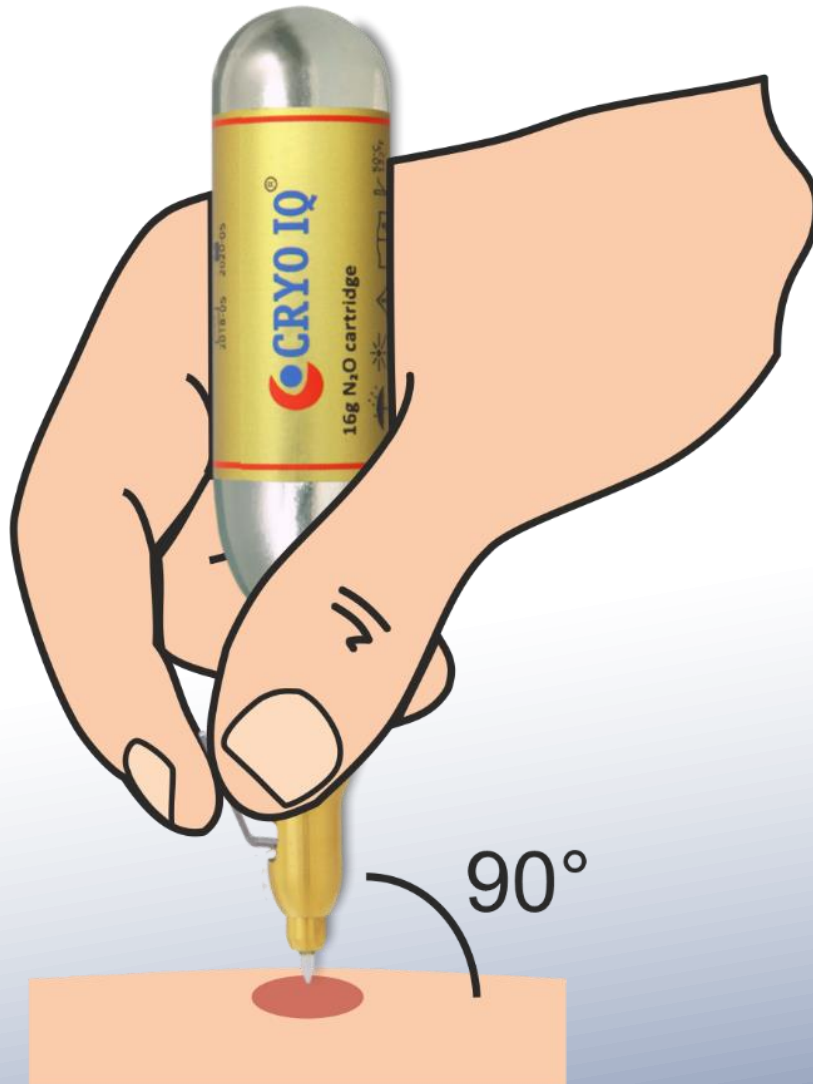
- Measure the wart
- Debride the wart to pinpoint bleeding.

**Plantar warts must always be cut  
clean before any cryosurgery**

**No Exceptions!!**

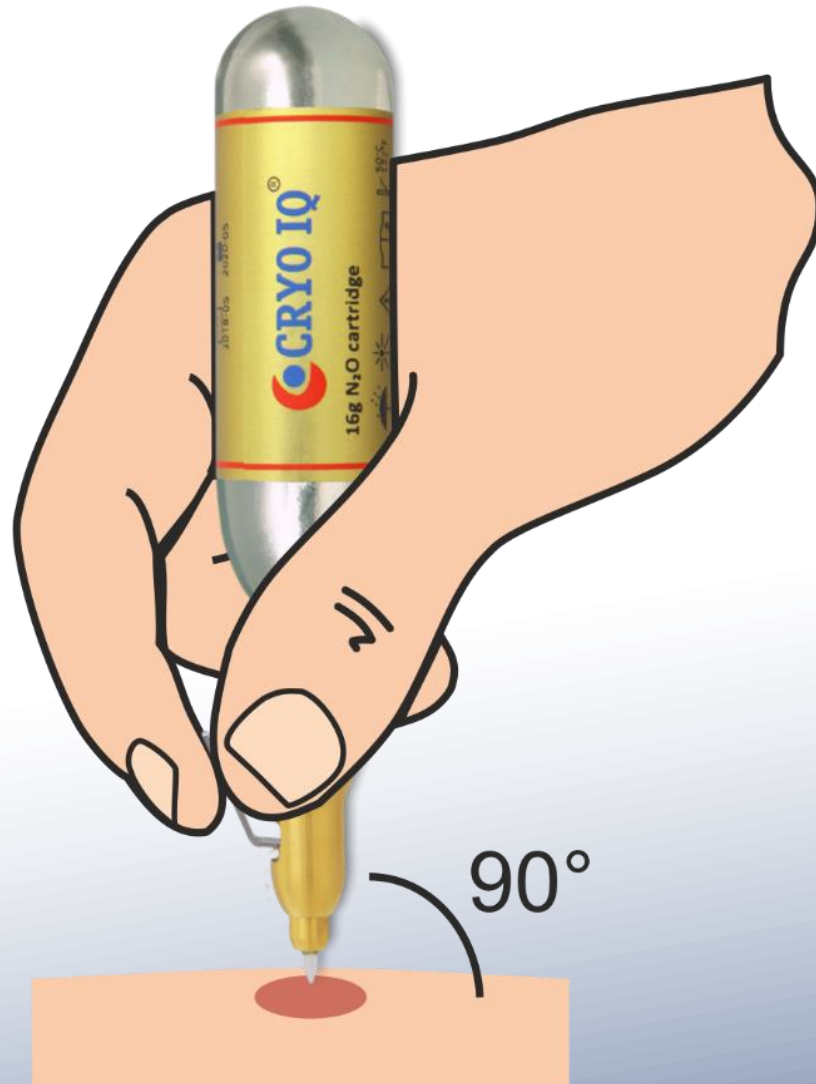
**Why:**

**The keratin (the hardening prevents  
the cold from reaching the skin lesion  
(the virus))**



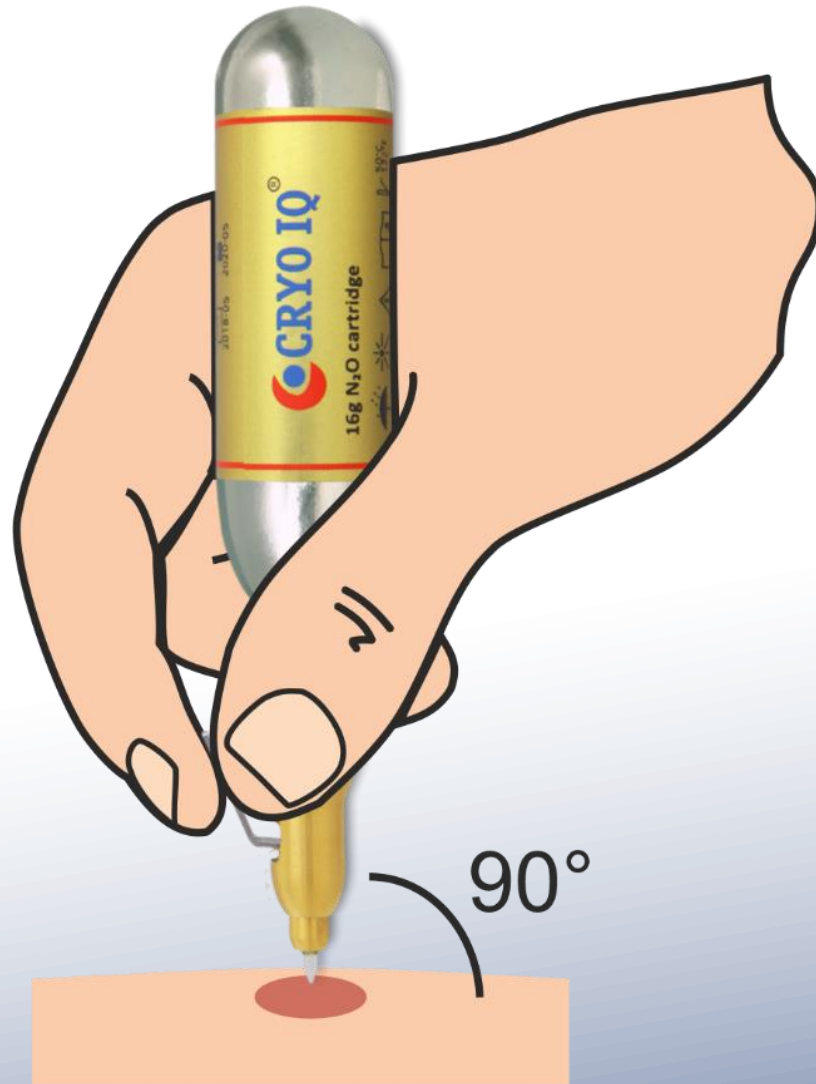
To apply the cryogenic liquid gas the dispenser tip is held close to the skin surface and activated by the finger trigger.

The liquid gas travels in a phase stable state enabling cells to be destroyed accurately and safely.



**For every 3 seconds of freeze you are able to penetrate the skin 1 mm.**

**The maximum skin penetration is 5-6 mm and maximum treatment time per individual freeze 25-30 seconds.**



A good rule of thumb with non-facial lesions is that the lesion is half the length as it is wide.

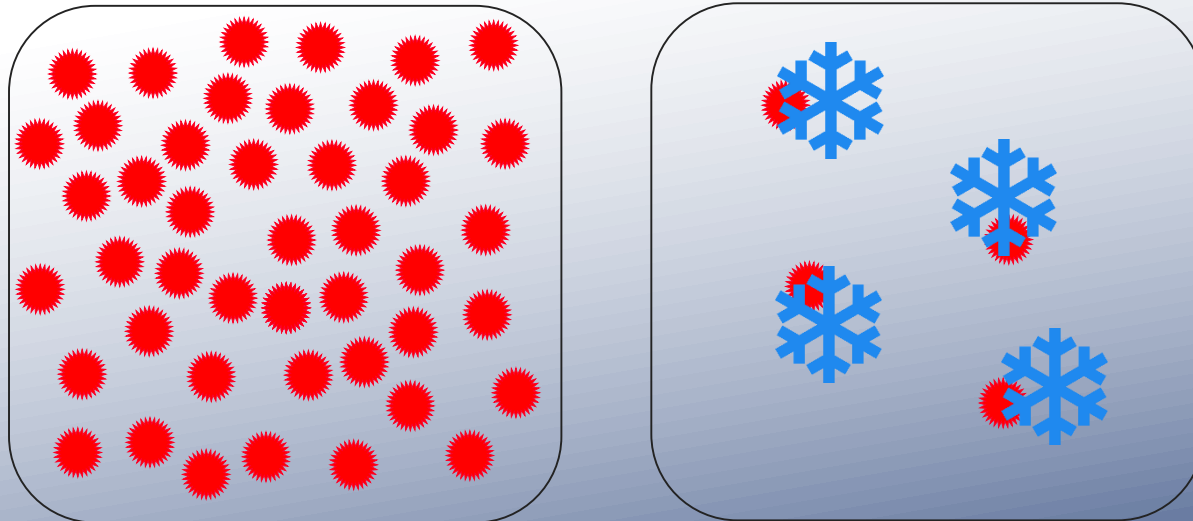
For example: If a simple wart is 3 mm wide, it can be safely assumed to be 1.5 mm in depth.

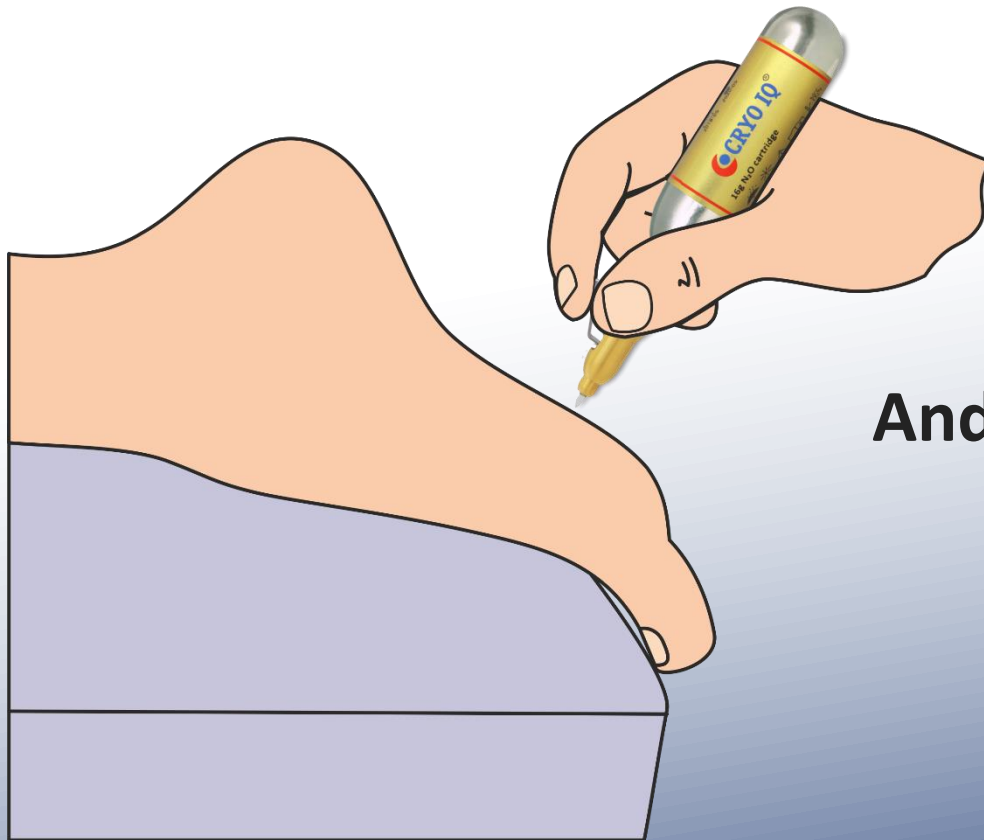
Therefore, you want to freeze for 4 – 5 seconds

**After after 30 seconds you have to make a second freeze for 4-5 seconds.**

## Why is a second freeze important within 30 seconds

Since some cells may have been isolated by ice formations, it is important to freeze a second time to ensure that no cells survived.





**And then freeze**



**Once I have treated**

**What happens next...**

- A white discoloration appears on the treated area.
- After a few minutes of thawing, a violet discoloration appears peripherally on the treated area. This discoloration moves towards the center of the area.
- Shortly thereafter, the treated tissue fades, but redness may remain.
- Gradually, a blood blister forms, which turns into smaller blisters (sometimes these are also filled with blood). These blisters may persist for several weeks.

- The treated area normally contracts over 10-14 days and dead tissue is rejected during this time and absorbed by the body.
- Depending of the size of the lesion, a follow up appointment with the patient may be required within 3 weeks.
- Larger lesion may require multiple treatments
- At a follow up appointment, it can then be decided if a further treatment of the lesion is needed or not.



**[www.cryoiq.com](http://www.cryoiq.com)**

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