

CASE STUDIES FOR ARCTIC CIRCLE TRAINING: HANDS ON

SCA:

A 48-year-old male is admitted to your unit. He experienced VFib arrest in the field, CPR, downtime of 17 minutes. He is comatose, not responding to verbal commands; intubated in the field. You need to set up the Arctic Sun and initiate therapy- goal is 33°C. He is 6'3", 238 pounds.

Have participants run through pad selection, probe placement, setting up device.

What meds are you going to start? When?

Review protocol with participants

Two hours have passed and the patient has only dropped temperature by .5°C.

Review issues with patient not cooling.

The patient needs to go to CT Scan.

Have participants run through the purge, then filling the device.

The patient's temperature is slightly elevated to 33.3°C and 3 arrows are illuminated upwards. The water temperature has decreased from 31°C to 19°C.

Discuss heat generation and shivering assessment.

Twenty four hours have passed- it is now time to re-warm patient. Re-warm at .25°C/hour back to 37°C (or hospital protocol)

Have participants walk through re-warming.

You receive a low flow alert.

Discuss factors associated with low flow and troubleshooting.

Neuro-fever:

A 66-year-old female is admitted to your unit with a temperature of 40.4°C. The Arctic Sun is ordered. You need to set-up and initiate therapy- the goal is 37°C. She is 5'3", 110 pounds.

Have participants run through pad selection, probe placement, setting up device.

What meds are you going to start? When?

Review protocol with participants

Two hours have passed and the patient has only dropped temperature by .8°C.

Review issues with patient not cooling.

The patient needs to go to CT Scan.

Have participants run through the purge, then filling the device.

The patient's temperature is slightly elevated to 37.3°C and 2 arrows are illuminated upwards. The water temperature has decreased from 24°C to 9°C.

Discuss heat generation and shivering assessment.

You receive a low flow alert.

Discuss factors associated with low flow and troubleshooting.