



## Instructions for Use

### Ankle Block Simulator

### MS2-ANK

#### 1. Preparation

##### TRAINING GOAL #1: SETTING UP THE ULTRASOUND MACHINE

- Needle: Use sharp bevel needles, best with  $\leq 22G$  best with small diameter (25G). The use of small gauge needles increases the lifespan of the simulators.
- Sterile water ONLY when practicing injections
- Transducer: Linear - high-frequency transducer
- Depth: 3-4 cm
- **IMPORTANT: INCREASE the ultrasound gain BEFORE SCANNING (simulators are somewhat less echogenic and require more gain to obtain images similar to the human tissue)**

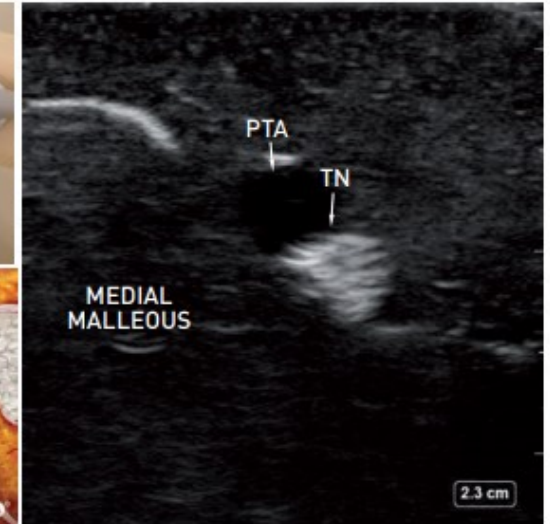
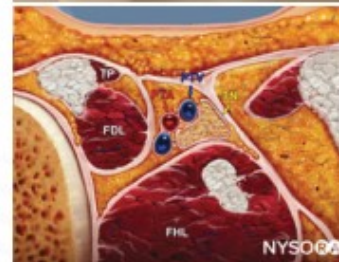
#### 2. Scanning

##### TRAINING GOAL #2: ANATOMY RECOGNITION

**Tibial nerve:** Place the transducer transversely between the medial malleolus and the Achilles tendon.

Identify the following structures:

- TN: Tibial nerve
- PTA: Posterior tibial artery
- Medial malleolus

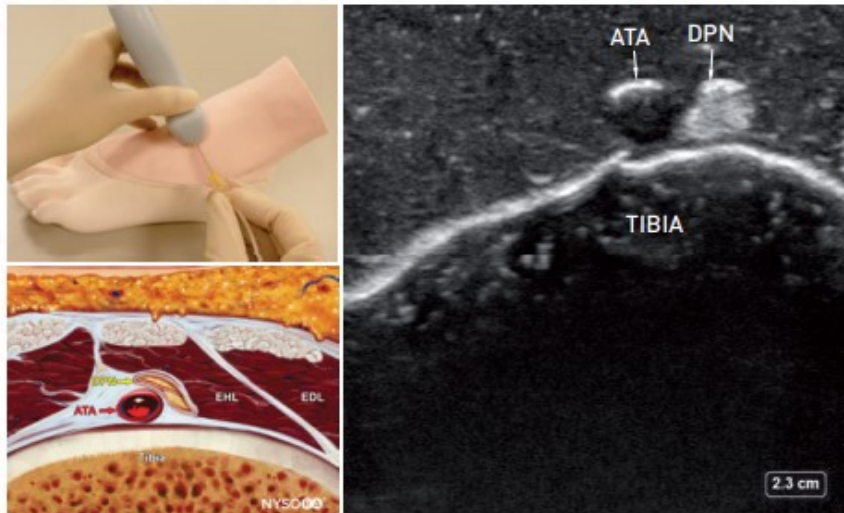




**Deep peroneal nerve:** Place the transducer in a transverse orientation on the anterior aspect of the ankle, at the level of the extensor retinaculum.

Identify the following structures:

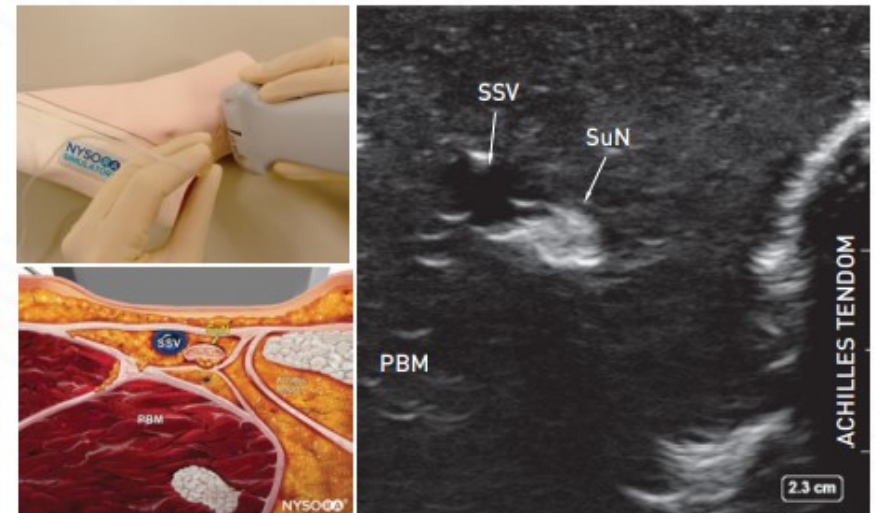
- ATA: Anterior tibial artery
- DPN: Deep peroneal nerve
- Tibia



**Sural nerve block:** Place the transducer in a transverse orientation between the lateral malleolus and the Achilles tendon.

Identify the following structures:

- SuN: Sural nerve
- SSV: Small saphenous vein
- Achilles tendon

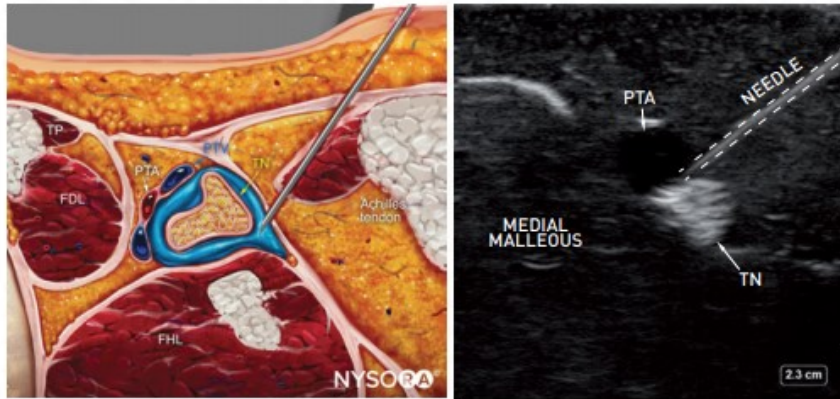




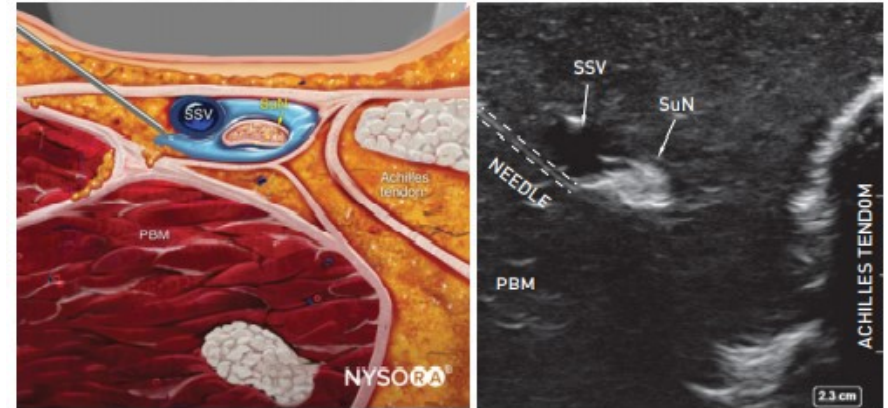
3. Procedure

**TRAINING GOAL #3: PRACTICE NEEDLE INSERTION INTO RELEVANT ANATOMY**

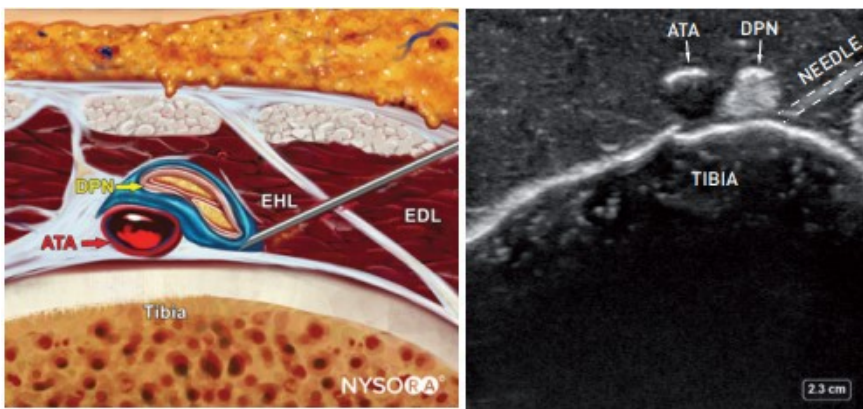
**Tibial nerve block:** Insert the needle using an in-plane or out-of-plane technique and advance into the fascial plane enveloping the nerve.



**Sural nerve block:** Insert the needle using an in-plane or out-of-plane technique and inject 3-5 mL of local anesthetic adjacent to the vein.



**Deep peroneal nerve:** Insert the needle using an in-plane or out-of-plane technique toward the fascial sheath containing the nerve.





## **WARRANTY**

Valkyrie products are made to the highest standards. Your simulator is warranted to you by Valkyrie for six months from the date of purchase against manufacturing defects in workmanship and materials. During the warranty period a defective simulator will be replaced either with a new or reconditioned unit. This warranty covers normal consumer usage and does not cover damage incurred through use not consistent with the simulators design. Failure that results from misuse or neglect is not covered under this warranty.

## **PRODUCT CAUTIONS**

Read and follow Instructions and recommendations. Please take extreme care when using needles so as not to accidentally injure yourself during training.

Avoid placing the simulator near a heat source as this will potentially lead to deformation or damage to the unit.

Avoid placing the simulator on printed material or rough surfaces as the print or surface shape may transfer to the unit.

## **CARE AND MAINTENANCE**

Clean the simulator with alcohol or soap and water before storage. Allow dry naturally or dab dry with a lint-free cloth.

Store at room temperature.

Never place objects on top of the simulator while in storage.

