CARE INSTRUCTIONS

1. Clean the discs using a pH-neutral disinfectant and a clean cloth.
2. Caution: Acidic or alkaline cleaners may lead to surface discoloration.

INQUIRIES
For additional information, to place an order, or to report errors, accidents or adverse reactions, contact:
AxoGen® Customer Care
888.AxoGen1 (888.296.4361) or 386.462.6800
CustomerCare@AxoGenInc.com

REFERENCES


It's time to rethink nerve repair.
AxoTouch™ Two-Point Discriminator

Sensibility testing plays an important role in the evaluation of nerve function. It assists the healthcare professionals in detecting changes in sensation, assessing return of sensory function, establishing effective treatment interventions, and providing feedback to the patients. The AxoTouch™ Two-Point Discriminator tool is a set of two aluminum discs each containing a series of prongs spaced between 2 to 15 millimeters apart. Additionally, 20 and 25 millimeter spacing is also provided. A circular depression on either side of the disc allows ease of rotation. The discs can be rotated between a single prong for testing one-point and any of the other spaced prongs for testing two-point intervals with ease.

INDICATIONS FOR USE

Use the AxoTouch™ Two-Point Discriminator tool to measure the innervation density of any surface area of the skin. The discs are useful for determining sensation after a nerve injury, following the progression of a repaired nerve, and during the evaluation of a person with a possible nerve injury, such as nerve division or nerve compression.

CONTRAINDICATIONS

None known

PRECAUTIONS

Not recommended for open wounds or inflamed areas.

MEASUREMENT

Sensory innervation density can be determined by the measurement of both the slowly-adapting and quickly-adapting fiber-receptor systems across the surface of the skin. In order to adequately evaluate function in the area being tested, both fiber-receptor systems should be evaluated with moving and static two-point discrimination. The AxoTouch™ Two-Point Discriminator can be used to assess nerve sensory function on external areas of the body. The testing procedures below describe use on the hand and digits however similar methodology may be used to measure innervation density on other body surfaces.

Static Two-Point Discrimination: Static Two-Point Discrimination test evaluates the innervation density of the slowly-adapting fiber-receptor system. This test assesses hand function requiring precision sensory grip and constant touch, e.g., holding a pen to write, a key to put into a lock.

Testing Procedure:
1. Place hand in a fully supinated position supported comfortably on an object such as rolled towel or foam.
2. Identify the digits and innervation zone to be tested. Occlude the patient’s vision from the testing site.
3. Start at 5mm distance between the two prongs.
4. Placement of two prongs should stay within the innervation zone and be in line with the nerve to be tested, so that they are parallel to the long axis of the digit.
5. Apply enough pressure to the point of blanching the skin.
6. Randomly alternate between one and two prongs in the zone.
7. Ask the patient to respond whenever a prong is felt and whether it is one or two points. Allow approximately 3 to 4 seconds between applications.
8. Seven of ten responses are required to be considered accurate.
9. If there is no response or an inaccurate response, increase the distance by 1mm until 7 of 10 responses are accurate.
10. If 7 of 10 responses are correct, decrease the distance by 1mm and begin the test sequence again until fewer than 7 of 10 responses are correct. Testing is stopped at 2mm.
11. Record the smallest distance measured in mm.
12. Repeat procedure in additional digits as required.

Moving Two-Point Discrimination: Moving Two-Point Discrimination test evaluates the innervation density of the quickly-adapting fiber-receptor system. This test assesses hand function requiring moving touch, e.g., object identification (tactile gnosis), fine discriminative or manipulative tasks.

Testing Procedure:
1. Place hand in a fully supinated position supported comfortably on an object such as rolled towel or foam.
2. Identify the digits and innervation zone to be tested. Occlude the patient’s vision from the testing site.
3. Begin testing at 8mm moving longitudinally from proximal to distal in a linear fashion along the surface of the fingertip in the innervation zone. Apply enough pressure to the point of blanching skin.
4. Randomly alternate between one and two points.
5. Ask the subject to respond whenever a prong is felt and whether it is one or two points. The patient must correctly identify the stimulus 7 out of 10 responses before proceeding to a smaller value. The test is repeated down to a separation of 2mm.
6. If there is no response or an inaccurate response, increase the distance by 1mm until 7 of 10 responses are accurate. Testing is stopped at 15mm.
7. Record the smallest distance measured in mm.
8. Repeat this procedure in additional digits as required.