PeriFlux System 5000 - Toe Pressure System

Peripheral pressure measurements - toe, ankle, limb, finger

**Toe and ankle pressure** measurements, including calculation of **ankle/toe-brachial index (ABI/TBI)**, are well established, objective tests for diagnosis and management of peripheral arterial disease (PAD) and critical limb ischemia (CLI).¹ These tests also give valuable clinical information for the evaluation and planning of revascularization procedures. Toe pressures are of particular importance in patients suffering from arterial calcification, a condition which often leads to falsely elevated ankle pressure values and a subsequent under-diagnosis of disease.

PeriFlux System 5000 provides your staff with a **simple, non-invasive** solution for assessing peripheral pressures in patients with suspected PAD.

**Procedure:**

1. **Attach Cuffs and Laser Doppler Probes**
   - Small probes for easy positioning
   - Simultaneous reading at several sites
   - Local heating feature in probes

2. **Perform Measurement**
   - Less than 2 minutes per assessment

3. **Automatic Generation of Reports**
   - Calculation of ABI/TBI
   - Exportable
   - Printable
Sensitive at Low Pressures

The PeriFlux System 5000 uses laser Doppler technology to measure systolic toe and ankle blood pressures. Laser Doppler has proven to be more sensitive than photoplethysmography in the low pressure range and does not require pulsatility. The procedure involves placing an appropriate cuff on the toe/limb and a laser Doppler probe distal to the cuff. The cuff is first inflated to a pressure well above the systolic blood pressure, and is then deflated linearly until the laser Doppler probe detects the return of blood perfusion. The pressure at the return of the blood perfusion is equivalent to the systolic toe or ankle pressure.

Simple Solution for Cold Ischemic Feet

It may be difficult to assess toe pressures in patients with cold, ischemic feet. Therefore many vascular labs routinely warm the feet of their patients using IR lamps, foot baths or other methods. The PeriFlux System 5000 offers an alternative solution. By extending the system with a PF 5020 Temperature Unit and using a combined heat and laser Doppler probe, it is possible to heat the skin locally at the measurement point to a specific temperature and avoid time-consuming, inexact traditional methods.

Flexible Solution for the Vascular Lab

The PeriFlux System 5000 is a versatile system that provides the user with several options to investigate and diagnose the status of the peripheral circulation both on a macro- and a microcirculatory level. In addition to peripheral pressures, it is possible to measure Pulse Volume Recording (PVR), Segmental Pressures, Skin Perfusion Pressure (SPP) and Post-Occlusive Reactive Hyperemia (PORH). Furthermore, the system is modular and can easily be expanded to include other functionalities such as transcutaneous oxygen and heat provocation.

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✔ Accurate at low pressures
✔ Flexible and expandable, number of simultaneously measured sites can easily be increased
✔ Simple and robust, only one operator necessary

References:
1. TASC II. Eur J of Vasc & Endovasc. Surgery, 2007 vol 33 suppl 1

Due to Perimed’s commitment to continuous improvement of our products, all specifications are subject to change without notice.

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