MULTIFREQUENCY TYMP
INVENTED BY PATH MEDICAL

A FULL ASSESSMENT OF THE MIDDLE EARS REFLECTANCE AND CONDUCTANCE CAN BE MADE WITHOUT WIDEBAND REFLECTANCE DEVICES

The most common probe tone frequency used in tympanometry is 226 Hz. Using 226 Hz, well known and categorized tympanogram shapes can be obtained, especially in adult patients. When testing infants younger than four months, a probe tone frequency in the range 660-1000 Hz is recommended. In many cases though, the optimal probe tone frequency is not a well established value. Multi frequency tympanometry is said to improve on middle ear diagnostics but in practice the “standard” measurement is performed and analyzed later on. However, a subset of multifrequency information – based on the relevant and well established frequencies can help in daily practice to speed up and improve the diagnostics.

Therefore PATH MEDICAL introduced the simultaneous stimulation of 226 Hz, 668 Hz, 800 Hz and 1000 Hz whilst testing tympanometry. In one single recording four different traces are obtained - ready for immediate evaluation by the doctor. No need to spend more time or money for postprocessing of 3D graphs to receive the graphs which are used for diagnostics.

Read more on multifrequency tympanometry online:
THE ADVANTAGE OF MULTIFREQUENCY TYPMANOMETRY

SENTIERO uses multiple sine (pure) tones (simultaneously presented) to generate the tympanogram. There is no confusing “extra information” and the results to be interpreted are displayed immediately. Also, there is no limit regarding the pump speed and no problem with unintended triggering of the acoustic reflex. SENTIERO is a powerful diagnostic device with superb accuracy & speed.

THE DOWNSIDE OF WIDEBAND REFLECTANCE DEVICES

Other tympanometers on the market advertise a “wideband tym” by showing nice 3D graphs. However, there is very little research evidence that this has a clinical value in daily practice. Additionally, it has important downsides:

- The pump unit speed must be low or medium speed for this type of recording.
- The result screen which is interpreted by the specialist is derived indirectly from the reflectance curve by ‘cutting’ through the 3D image.
- Since the acoustic reflex threshold is generally lower for broadband stimuli, there is an increased risk of triggering the acoustic reflex during measurement.

This is not desired since it would influence the curves. In addition, acoustic reflex testing cannot be done with wideband tympanometry.

INTERACTIVE, ON-SCREEN CARTOONS ARE AVAILABLE FOR ALL OAE AND TYPMANOMETRY TESTS!

Engage the younger patients in a game where they pretend to be a pilot. Pilots are calm and concentrated to navigate. To support this game, hand over the flight badge (supplied by PATH) before the test and then begin.

Automatically after the test or manually whilst testing (press the plane symbol) you can review the results.

These are ready to print directly to pdf or label or to store in MIRA PC database.

Note that the same tympanometry probe can be used for IPSI reflex as well as for DPOAE or TEOAE measurements. Speed up your examination by saving preparation time!

INTERACTIVE, ON-SCREEN CARTOONS ARE AVAILABLE FOR ALL OAE AND TYPMANOMETRY TESTS!

The interactive, on-screen cartoons are available for all OAE and tympanometry tests! These cartoons can engage the younger patients in a game, making the testing experience more enjoyable.

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THE ONLY DEVICE WITH TYPM, OAE AND AUDIO

This device offers multifrequency tympanometry, which allows for multiple sine (pure) tones to be simultaneously presented. It also provides DPOAE (Dissociated, Prolonged Otoacoustic Emissions) and TEOAE (Tympanic Emission Otoacoustic Emissions) measurements. The tympanometry component is designed to be user-friendly, with an interactive, on-screen cartoon experience for young patients.

TEOAE

- Selectable pass criteria and levels
- Fixed pass criteria and levels

DPOAE

- Selectable frequencies: 0.8 - 10 kHz
- Selectable pass criteria and levels
- Fixed frequencies: 2, 3, 4, 5 kHz
- Fixed pass criteria and levels

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