



# THD Anopress

The portable solution for Clinical Anorectal Manometry

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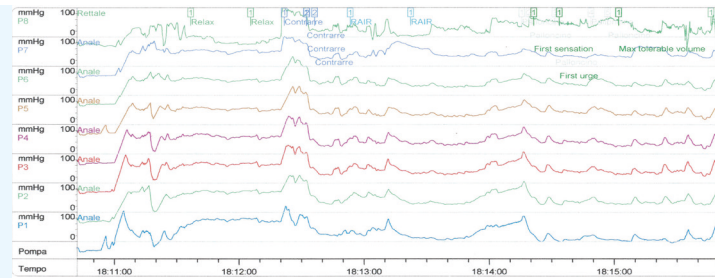
Anorectal manometry is the fundamental test for functional assessment of anal sphincter and rectum

Manometry is the only diagnostic technique which measures sphincter pressure and rectal sensitivity and reflexes

## UNTIL NOW:

Conventional manometry, generally performed by means of multichannel liquid transduction, is usually carried out in a separate lab, apart from the patient's clinical assessment. Currently, manometry shows several limitations: lack of standardization, need of catheter calibration, wide range of normal and abnormal values. Conventional manometry is a time consuming, uncomfortable exam.

An alternative technology introduced the use of solid transducers and software programs allowing for high-resolution 3-D reconstructions of the pressures measured in the various points of the anal canal. Unfortunately, in clinical practice the gap between the amount of available data and their actual clinical impact and therapeutic usefulness has become wider, making the data interpretation even more complicated.

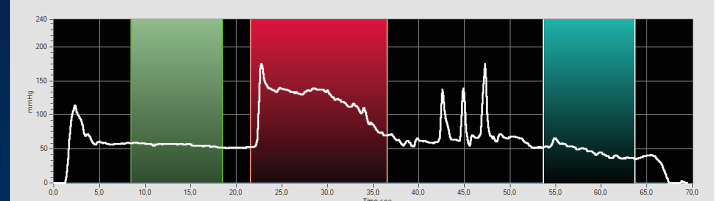


## THE THD SOLUTION:

Clinical Anorectal Manometry is directed at overcoming many of these issues, because it is directly accessible to the physician, and not simply interpreted by an external clinician.

Correlating manometric data to patients' symptoms is simple, rapid and easily repeatable, thus becoming an integral part of the diagnostic pathway and allowing for monitoring the effects of rehabilitation or surgery.

Standardized and repeatable data are immediately available to the user for an effective curve interpretation (Wave Concept) in a variety of pathological conditions.



# THD Anopress

Simple, rapid and easy. Repeatable for an immediate and effective interpretation



Compatible with most PCs

## BENEFITS

### ACCURATE

Values are replicable and standardized. Device is self-calibrating for a precise, continuous pressure measurement of the entire length of the anal canal. Real time mean pressure of sphincter complex, RAIR and rectal sensation are immediately available.

### FAST

Each proctologist can perform the test themselves with extremely short learning curve and no technical difficulties. Comfortable exam lasting between 5 to 10 minutes.

### EASY

Results are immediately available for interpretation and symptoms matching. Functional diagnosis and distinction between muscular activity is intuitive and accurate.

### COST EFFECTIVE

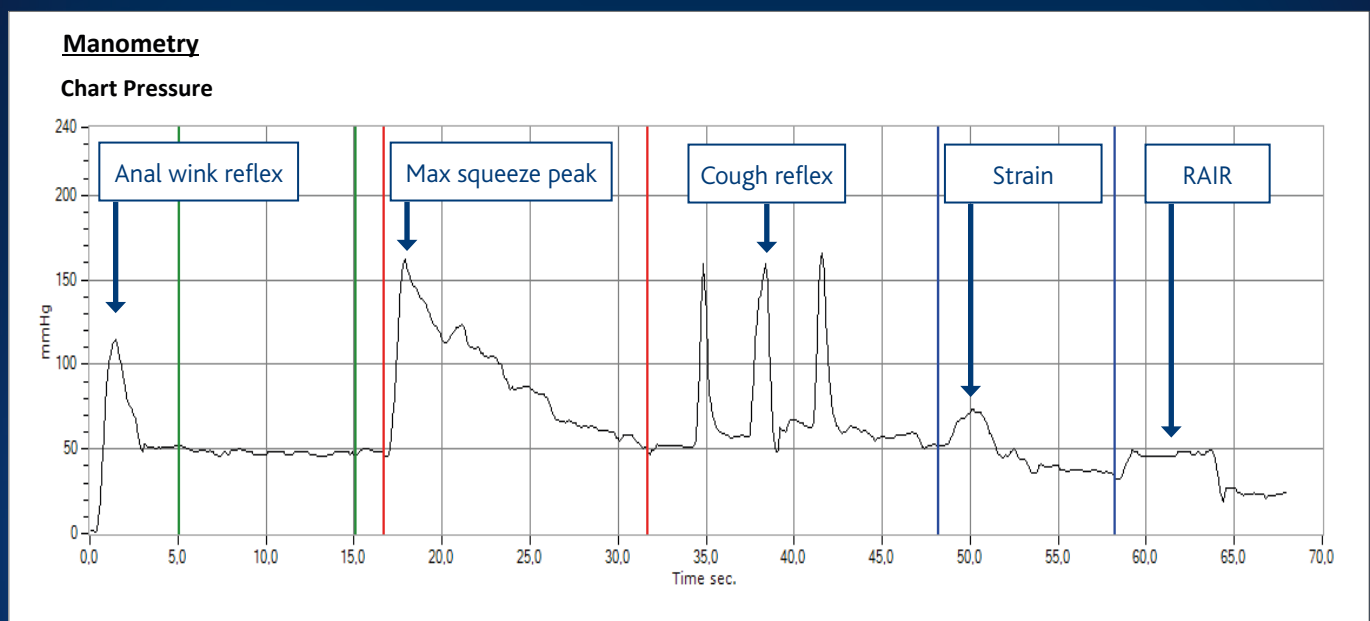
Portability allows the use in any location, from the out-patient clinic to the bedside. Disposable inexpensive probes have the longest shelf life with no need of maintenance.



# WHEN A CLINICAL MANOMETRY SHOULD BE DONE

- Passive/active fecal incontinence
- Obstructive defecation syndrome or chronic constipation
- Obstetric injury or post partum sphincter damages
- Chronic anal pain
- Peripheral nervous system damage (trauma, diabetes, sclerosis)
- Monitoring the effects of rehabilitation or surgery (pre & post sphincter repair, anal fissure or fistula treatment, etc.)

## THE WAVE CONCEPT



THD® Anopress designs a **WAVE** describing the activity of the sphincters during the contractile/relaxing phase, identifying sphincter pressure variations not only from a numerical, but also from a morphological view-point.

Operator can quickly distinguish between a physiological and pathological result, identifying the muscle(s) involved in the functional alterations.

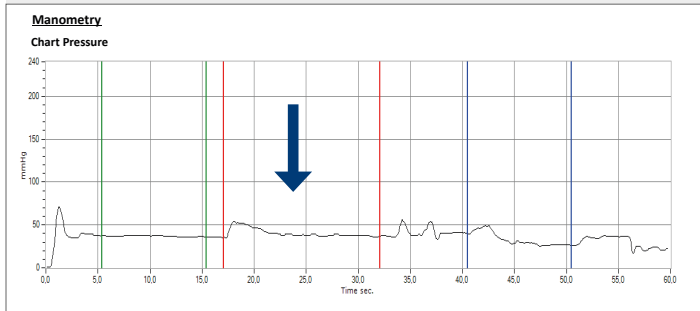
# WHICH DATA COME FROM A CLINICAL MANOMETRY



1	<b>ANAL WINK REFLEX:</b>	Initial pressure peak represents the anal wink reflex, or anal-cutaneous reflex when the physician inserts the probe in the anal canal
2	<b>RESTING:</b>	The resting tone is determined by the intrinsic tension of the sphincters, mainly by the IAS
	Average:	Average resting pressure (mmHg)
3	<b>SQUEEZE:</b>	During the squeeze stage, the surgeon asks the patient to contract the sphincters. Pressure in this phase is mainly due to EAS contraction
	Max:	Maximum pressure during the interval (mmHg)
	Average:	Average pressure during the interval (mmHg)
	Max/Rest.:	Ratio between the maximum pressure of the interval and the average resting pressure
	% Avg./Max:	Percentage ratio between the average pressure and the maximum pressure
	Endurance:	Calculated as the time between the maximum pressure and the pressure value after falling 50% compared to the difference of the maximum pressure and resting (sec)
4	<b>COUGH REFLEX:</b>	Describes a rapid peak with a likewise rapid drop, reflects the involuntary EAS activation
5	<b>STRAIN:</b>	During the strain the normal manometric wave has a minimal transitory increase and then decreases before stabilizing at values close to or lower than the resting pressure
	Average:	Average pressure during strain (mmHg)
	% Avg./Res. Avg.:	Percent difference between average pressure during strain and average pressure at rest
6	<b>RAIR:</b>	The RectoAnal Inhibitory Reflex is present when a pressure decrease is visible just after a rapid (60 ml) insufflation of the sensyprobe rectal balloon
	<b>RECTAL SENSATION:</b>	First sensation of defecation, desire or urgency detected following progressive insufflation of the THD® SensyProbe rectal balloon

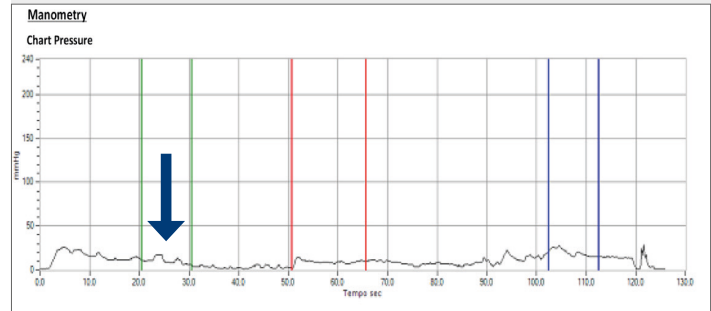
# CLINICAL VALUE

## EAS DEFECT



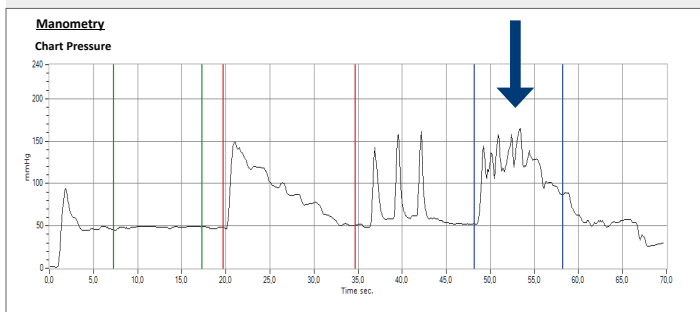
In a case of functional damage to the external sphincter there is no formation of the classical pressure peak during the squeeze pressure, including cough reflex.

## IAS DEFECT



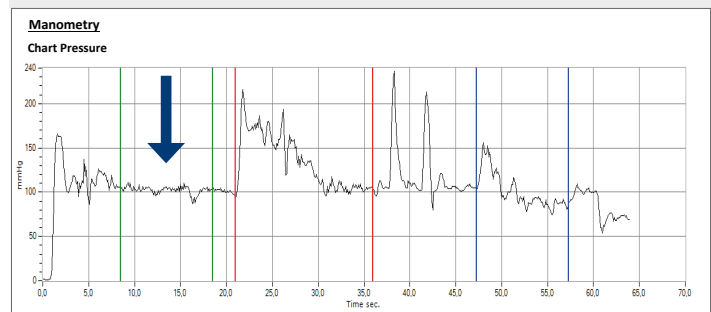
Resting values lower than 35mmHg suggestive of IAS weakness.

## PARADOXICAL CONTRACTION



The wave shows a pathological sphincter complex contraction during the straining phase, common condition seen in ODS.

## SPHINCTER HYPERTONE



A wave having a high resting pressure frequently is caused by a sphincter hypertone condition.

# CLINICAL STUDIES

## Comparison between high-resolution water-perfused anorectal manometry and THD® Anopress anal manometry: a prospective observational study

Leo C. A., Hodgkinson J. D., Cavazzoni E. et al. – 2020

## Evaluation of the Portable THD® Anopress Device in Patients with Faecal Incontinence

Leo C. A., Murphy J., Cavazzoni E. et al. – 2018

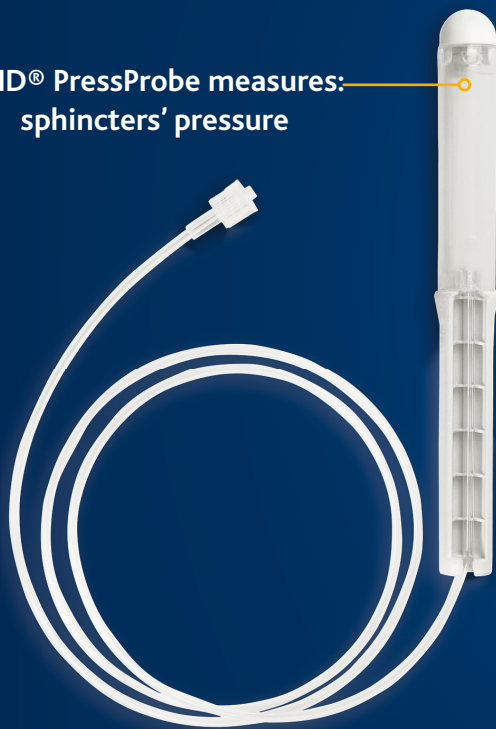
## Evaluation of 153 Asymptomatic Subjects Using the Anopress Portable Anal Manometry Device

Leo C. A., Cavazzoni E., Thomas G. P. et al. – 2018

# THD<sup>®</sup> PressProbe & THD<sup>®</sup> SensyProbe

Clinical Anorectal Manometry probes

THD<sup>®</sup> PressProbe measures:  
sphincters' pressure



THD<sup>®</sup> SensyProbe measures:  
sphincters' pressure  
RAIR and  
rectal sensitivity



THD<sup>®</sup> PressProbe has an ergonomic grip and a completely atraumatic profile to ensure minimum discomfort for the patient.

THD<sup>®</sup> SensyProbe offers the same features of THD<sup>®</sup> PressProbe with the additional capability to perform RAIR and rectal sensation investigation.

# SPECIFICATIONS

## **THD**Anopress

Part No. 800140-1

- Includes
- THD® Anopress
  - USB flash drive with software
  - THD® PressProbe (box of 1)
  - User's manual
  - Battery charger
  - Bluetooth dongle



# ACCESSORIES

## **THD**PressProbe

Part No. 800147-10 (pack of 10)



## **THD**SensyProbe

Part No. 800192-15 (pack of 15)

- Includes
- THD® SensyProbe
  - Syringe + 3-way stopcock

