Translating the science to the practical needs

Vaginal Tactile Imager

provides biomechanical mapping of pelvic supportive structures and function

Innovation for:

- Urogynecology
- Gynecology
- Aesthetic

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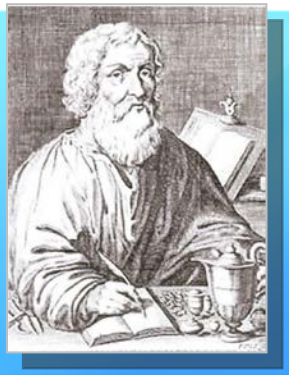
INTRODUCTION

Many of pelvic floor disorders, including pelvic organ prolapse, urinary incontinence, tissue athrophy, and pelvic pain are related and manifested in the mechanical properties of pelvic organs and tissues. Therefore, mapping a response to applied pressure within the pelvic floor and measuring pelvic floor function opens new possibilities in biomechanical assessment of vaginal and pelvic floor conditions.



- 1825 B.C. -

Kahun Gynecological Papyrus

Discernere eam quae concepit ... like that "finger upon her *menaa*."

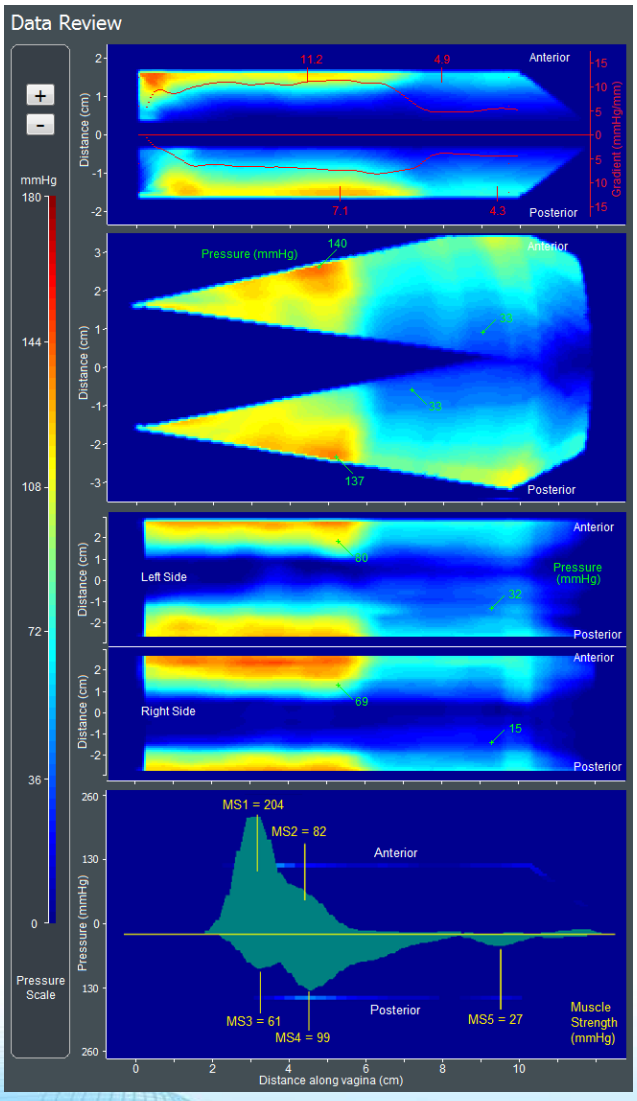
- 2015 -

International Urogynecology Journal

" ... tactile imaging markers may be used for quantitative characterization of female pelvic floor conditions...."

THE DEVICE

A vaginal probe equipped with 96 pressure/tactile sensors, motion tracking and temperature controllers allows:



Real time high definition Biomechanical mapping of vagina

Tactile imaging of apical anterior and posterior compartments

Visualization of anatomical features and assessment of pelvic floor support structures

Circumferential tactile imaging of vagina

Dynamic assessment of pelvic floor muscles during voluntary and involuntary contractions, involuntary relaxation and Valsalva maneuver

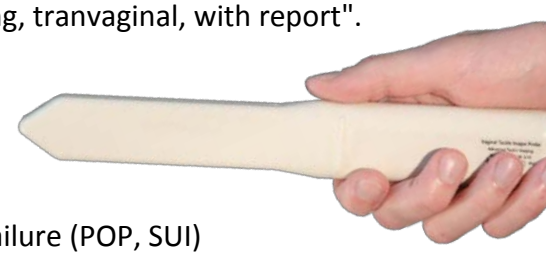
Indications for Use

The Vaginal Tactile Imager (VTI) obtains a high resolution mapping of pressures and assesses the strength of pelvic floor muscles within the vagina. It is used in a medical setting to acquire the pressures and store the corresponding data. It also provides visualization, analysis tools and information. The real time data as well the analysis information can then be viewed with an intention of assisting in the diagnosis and evaluation. The device is intended for use by physicians, surgeons and medically trained personnel.

Clinical Utility

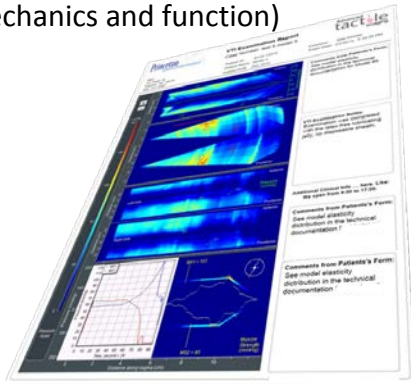
The further progress in women's healthcare is possible if a patient with a problematic pelvic floor conditions could undergo biomechanical diagnostic tests, the results of which could be fed into a structured patient-specific diagnostic workflow to consider multiple treatment options and to suggest the optimal one for that patient. The VTI allows a diagnostic study to obtain structure and functional information about vagina, pelvic floor muscles and ligaments.

The VTI procedures (8 tests) has a new CPT Code for "Biomechanical mapping, tranvaginal, with report".



The VTI may be used for:

- **POP**: to characterize and localize its development
- **SUI**: to quantify pelvic muscle defects which contribute into SUI
- **Treatment Failure**: to investigate the reasons for pelvic floor treatment failure (POP, SUI)
- **Obstetrics:** to characterize biomechanical integrity of the pelvic floor after childbirth
- **Pelvic Pain**: to identify factors contributing to pelvic floor pain
- **Deviation**: to recognize and quantify an abnormal biomechanical deviation at the earlier stage
- **Surgery**: to access outcome of pelvic floor surgery (changes in anatomy, biomechanics and function)
- **Laser, RF**: to evaluate vaginal conditions before and after laser or RF treatment
- **Aesthetic**: to assess vaginal conditions before and after an aesthetic surgery
- **Physiotherapy**: to monitor pelvic floor conditions in the course of applied treatment
- **Military, Sport**: to monitor pelvic floor changes under a heavy, repetitive load



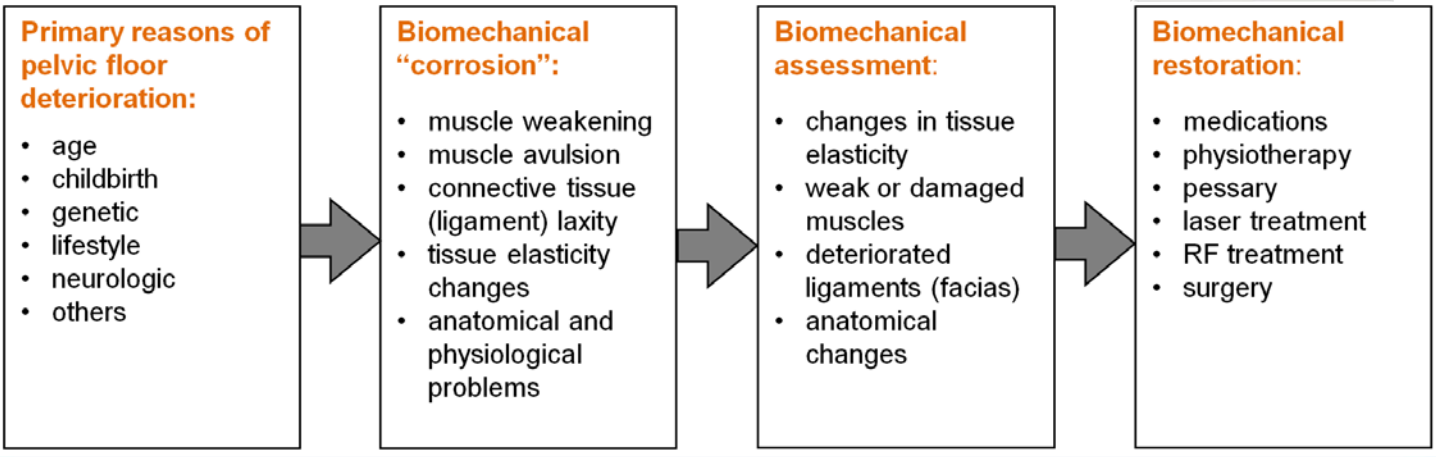


Figure 1. *Preferred process in women's healthcare [1].*

SELECTED PUBLICATIONS AND PRESENTATIONS

We deliver innovations to life.
Join the team!

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