



# Intra-vaginal and/or intra-rectal MRI compatible pressure probe

## Technology

The invention consists in coupling the measurement of intra-vaginal or intra-rectal pressure under stress, with dynamic MRI to observe and quantify the movement induced by this solicitation.

The measurement of the couple pressure / displacement is itself a tool to characterize in vivo, indirectly, the mechanical properties of organs, ligaments and muscles involved in pelvic posing a major challenge for the understanding of pelvic pathologies and improving their diagnosis and management.



## Benefits

- The vaginal and/or anal pressure sensor developed allows:
  - To carry conventional examinations without imaging tool and give purely qualitative results.
  - Coupled with MRI imaging tool it can provide quantitative results
- The probe is compatible with the MRI imaging
- The invention allows improved diagnosis of pelvic disorders.
- The invention allows to consider all scenarios childbirth.

## Applications

- Gynecology (prolapse ...)
- Obstetrics (Scenarios of deliveries ... ..)
- abdominal surgery ... ..

## Keywords

- Pressure sensor
- Pelvic system
- MRI compatible
- Vaginal probe
- Anal probe

## Intellectual Property

Patent filed February 21 2017 FR 1751369

## Development Status

Intravaginal and intra-rectal device for pressure measurement, validated in terms of technology and geometry (tested on animals)

Nondestructive and non-invasive characterization tool methods by inverse mechanical properties of all the pelvic cavity tissue validated.

## Partnership

Licensing

contact

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