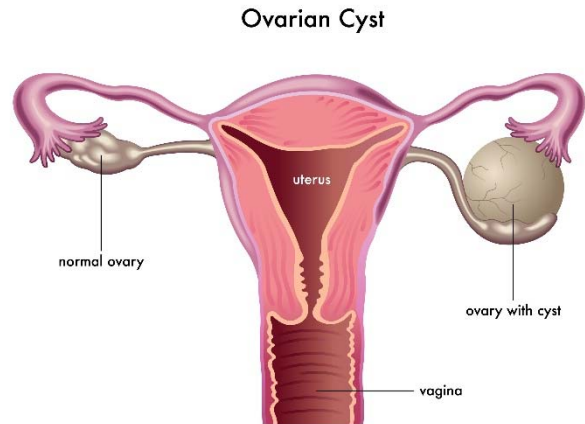


## PRELIMINARY STUDY: NON-INVASIVE TREATMENT OF OVARIAN CYST USING PULSED ELECTROMAGNETIC FIELD

An ovarian cyst is a fluid-filled sac within the ovary. Often they cause no symptoms. Occasionally they may produce bloating, lower abdominal pain, or lower back pain. The majority of cysts are harmless. If the cyst either breaks open or causes twisting of the ovary, it may cause severe pain. This may result in vomiting or feeling faint, and even cause headaches. Most ovarian cysts are related to ovulation, being either follicular cysts or corpus luteum cysts. Other types include cysts due to endometriosis, dermoid cysts, and cystadenomas. Many small cysts occur in both ovaries in polycystic ovary syndrome (PCOS). Pelvic inflammatory disease may also result in cysts. Rarely, cysts may be a form of ovarian cancer. Diagnosis is undertaken by pelvic examination with an ultrasound or other testing used to gather further details.[1]



1) "Ovarian cysts". Office on Women's Health. April 2019. Archived from the original on 12 August 2021. (rec. Wikipedia)

### IMAGE GUIDED & MONITORED TREATMENT By: Dr. Robert L. Bard

**Case History:** Submitted 8/1/2023

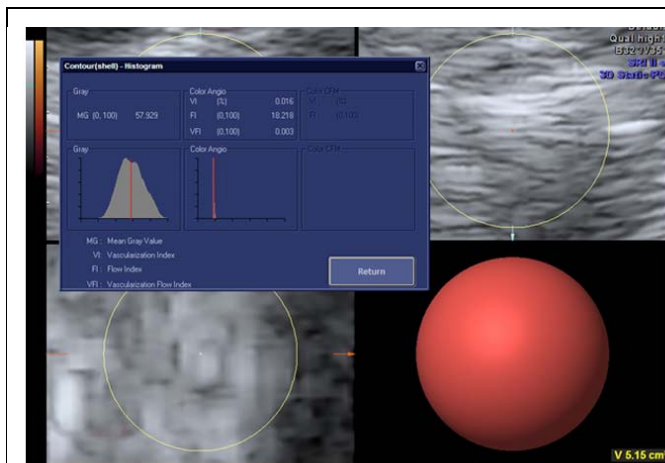
Confirmed Ovarian Cyst with lower abdominal fullness and left discomfort sonography was performed in multiple scan planes with 4D Doppler scan and real time analysis with 3D histogram analysis. Patient has undergone diagnostic scans from various ObGYN's to confirm disorder and no reduction in size since. Day 0 reports effects of a therapeutic paradigm employing pulsed bioenergy is applied under observation.

**Intracystic Hemorrhagic Debris**

**Day 0 Vascular Pedicle**

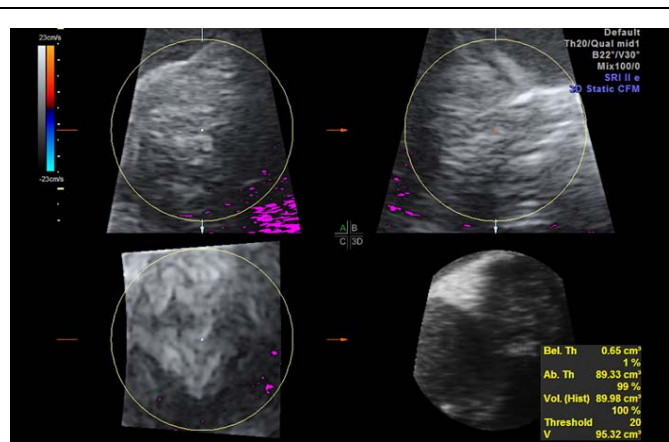
**Neovascularity 13.3%**

**Day 0:** Cyst with internal echoes 9x10cm with vascular pedicle (vessel index=13.3%).  
 Applied therapeutic (brand withheld) 20. PEMF30



DAY 1 Trace flow 0.01%

**Day 1:** Cyst without internal echoes 9x10cm with vascular pedicle =1% : (brand withheld) 20 PEMF30

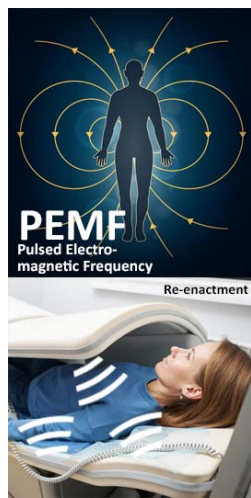


Day 36 absent vascularity

**Day 36:** Cyst 9x10cm with vascular pedicle=0% (brand withheld) 20 PEMF 10

## CONCLUSION

Elastogram of the cyst wall was performed demonstrating a kPa of 22 out of 41. Observing the wall showing early fibrotic changes appears to indicate that regression is possible with ongoing therapy - following treatment fullness decreased and no discomfort noted. The vascular pedicle imaged on targeted 4D volumetric sonography that was supplying the cyst was mitigated to no detectable flow on quantitative 3D Doppler histogram study.



## ABOUT THE EXPANSION OF PEMF THERAPY

Electromagnetic fields (EMFs) provide a non-invasive, safe, and easy method to treat and rehabilitate a growing list of health issues. The therapeutic theory behind this innovation is designed to affect the body at the extracellular level- imposing the ability to transduce or separate mechanical charge to electrical energy. This has been reported to affect the alignment and physical properties of tissues & cell nutrition toward the healing process. [2]

Electromagnetic fields (EMFs) and magnetic therapy presents a major increase in research attention in the past decade for its ability to directly treat the site of injury. [3] In the mid-1950's -'70's, the scientific community significantly advanced its research toward the treatment of delated fractures in Western Europe and the US. Recent reviews have shown benefits of PEMF to include: neurological disorders, vascular disease, lung disorders, GI (gastrointestinal) disease, rheumatic disease, dermatological issues, inflammation, tumors and immunological issues for both humans and animals.[4] Clinical research studies have reported benefits for a

host of specific issues including: musculoskeletal(MSK) Pain [5], bacteria and parasites, Osteoarthritis, mental health disorders (Depression), Multiple Sclerosis[6-7] and Alzheimer's Disease [8].

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