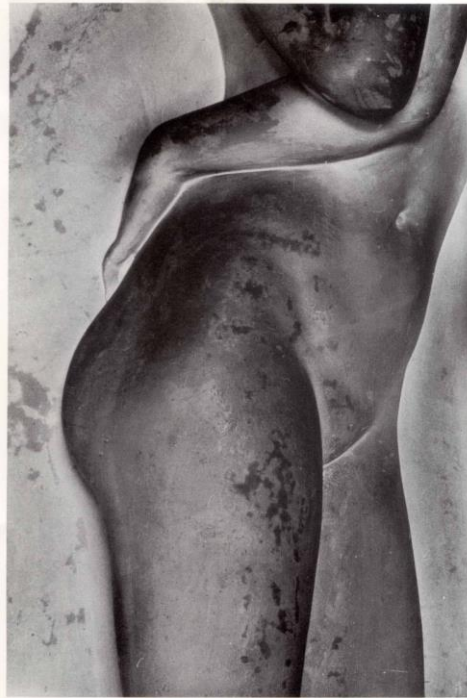


Acute Gynaecological Pathology – Is Ultrasound Useful?



Judith Hamilton, Lead Clinician
Early Pregnancy & Acute Gynaecology Unit,
St Thomas' Hospital, London

What causes acute pain / bleeding?

Uterus

- Fibroids
- Adenomyosis
- Endometriosis
- Haematometra
- Haematocolpos

Ovaries

- Physiological - mittelschmerz
- Cyst “accidents”
 - Bleeding
 - Torsion
- OHSS

Fallopian Tubes

- Tubo – ovarian abscesses
- Torsion

Coils

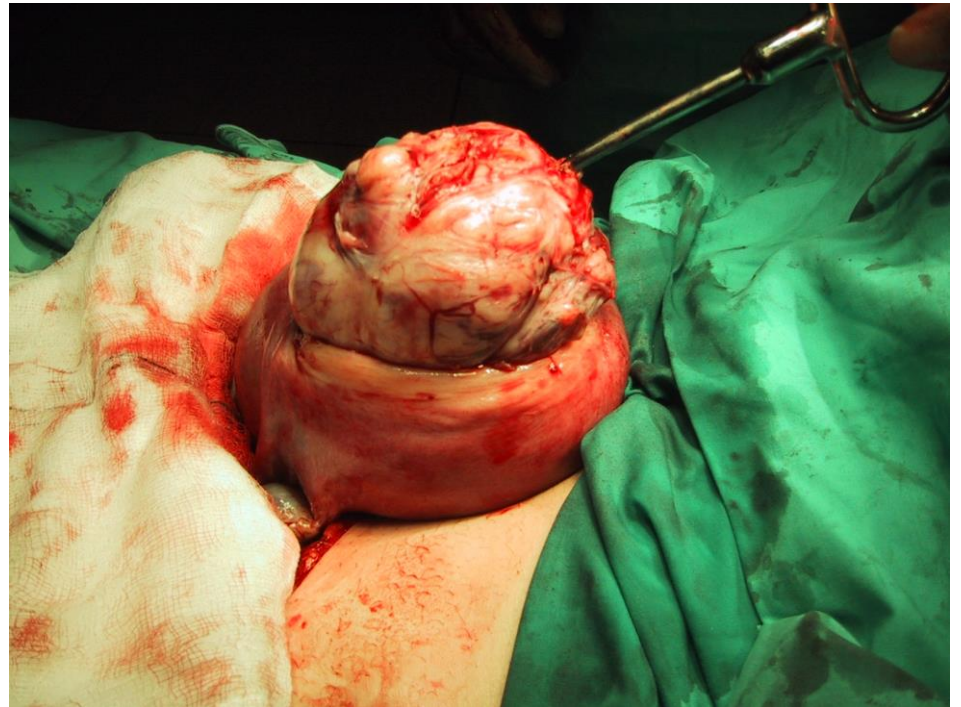
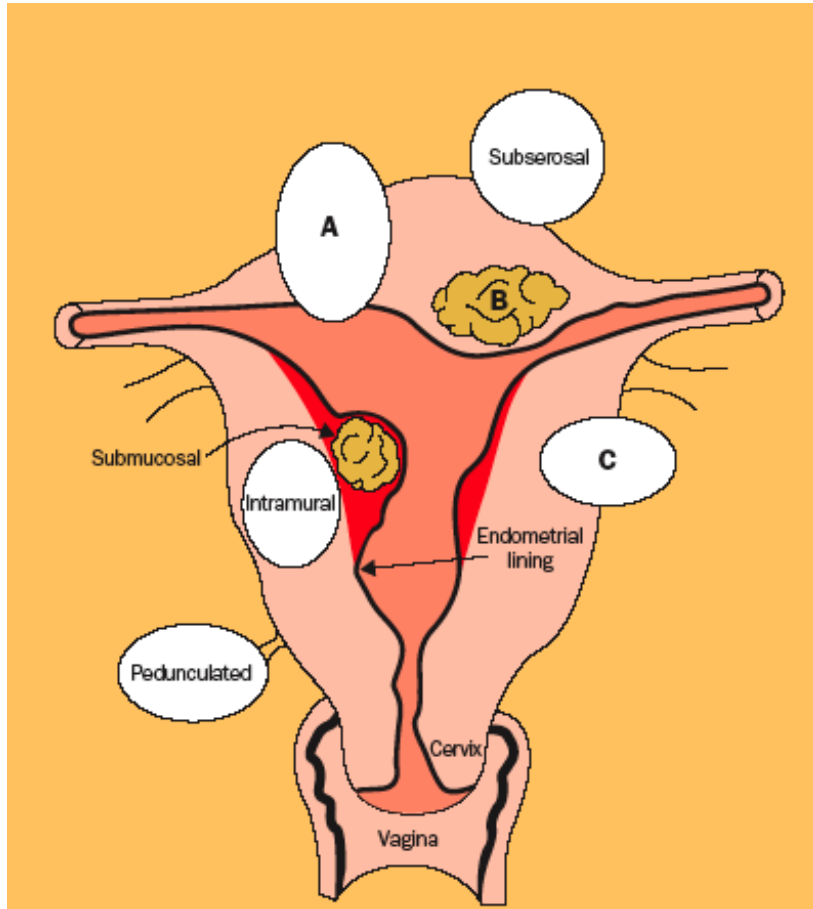
Major presenting symptoms reported by women
with subsequent uterine fibroid diagnosis¹

PERIODS LASTING 10 DAYS EVERY MONTH
FLOODING
BACK PAIN
THE PAIN
HEAVY BLEEDING
HEAVY PERIODS
STOMACH PAIN
BLED THROUGH JEANS
CONTINUOUS PAIN
STOMACH GETTING BIGGER
POURING
BLOATING
VERY HEAVY PERIODS
REALLY HEAVY PERIODS
HORRIFICALLY HEAVY PERIODS
FEELING BLOATED

Impacts of uterine fibroids on quality of life reported by women¹

A word cloud illustrating the negative impacts of uterine fibroids on quality of life. The words are arranged in a roughly rectangular shape, with some words oriented vertically. The colors are primarily black and dark red/maroon. The words include: DEPRESSING, LACK OF CONTROL, RESTRICTIVE, WORRY, DISABILITY, UNCONTROLLABLE, PANIC, DRAINING, DEBILITATING, EMBARRASSING, FRUSTRATED, LETHARGIC, DEPRESSED, PERMANENT, TIREDS, STRESSFUL, FEAR, YEAH, and DEBILITATED.

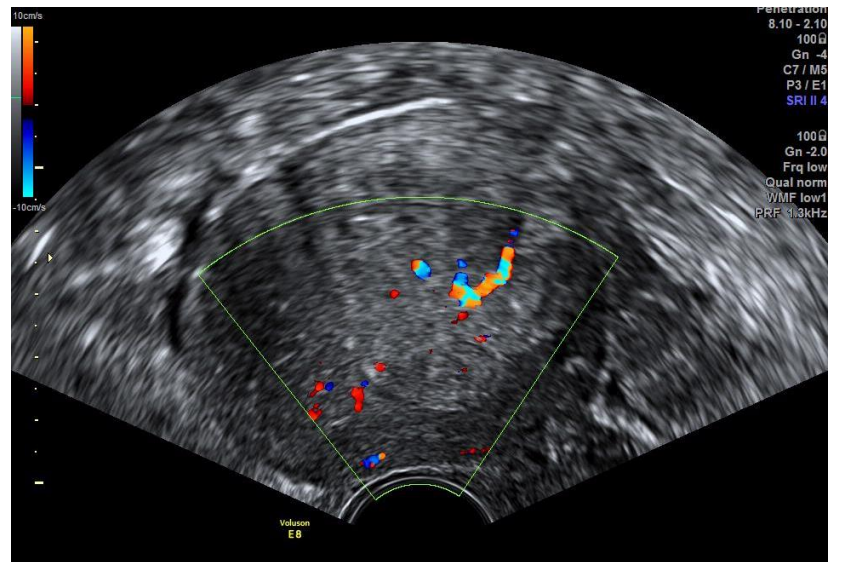
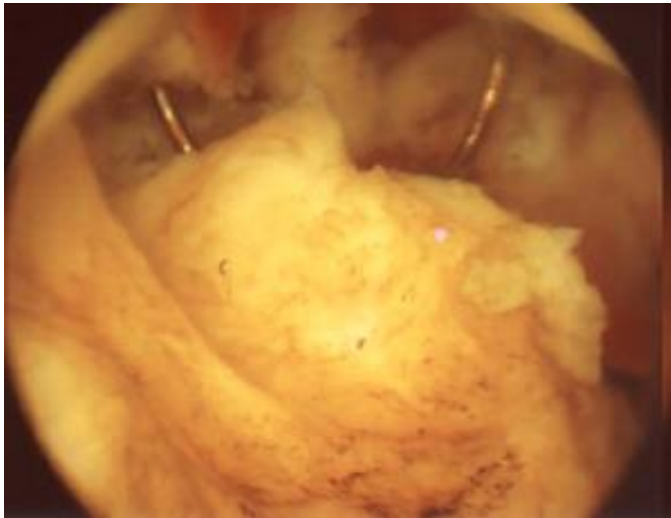
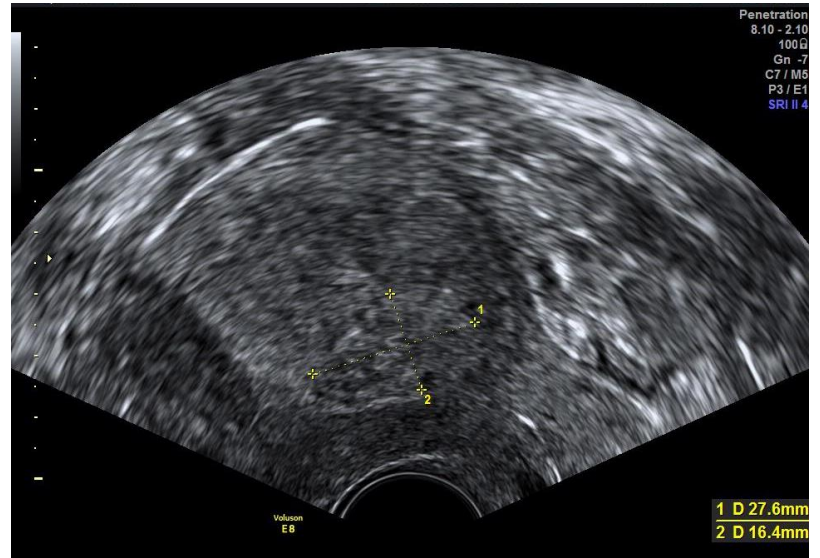
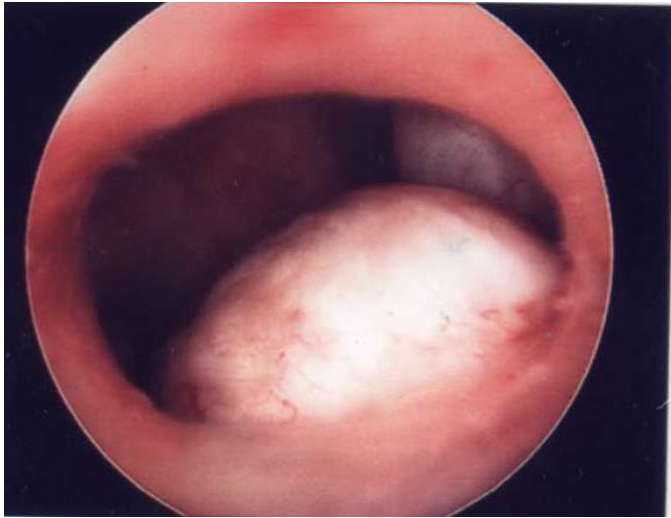
DEPRESSING
LACK OF CONTROL
RESTRICTIVE
WORRY DISABILITY
UNCONTROLLABLE PANIC
DRAINING
DEBILITATING
EMBARRASSING
FRUSTRATED LETHARGIC
DEPRESSED PERMANENT
TIREDS
STRESSFUL
FEAR
YEAH
DEBILITATED





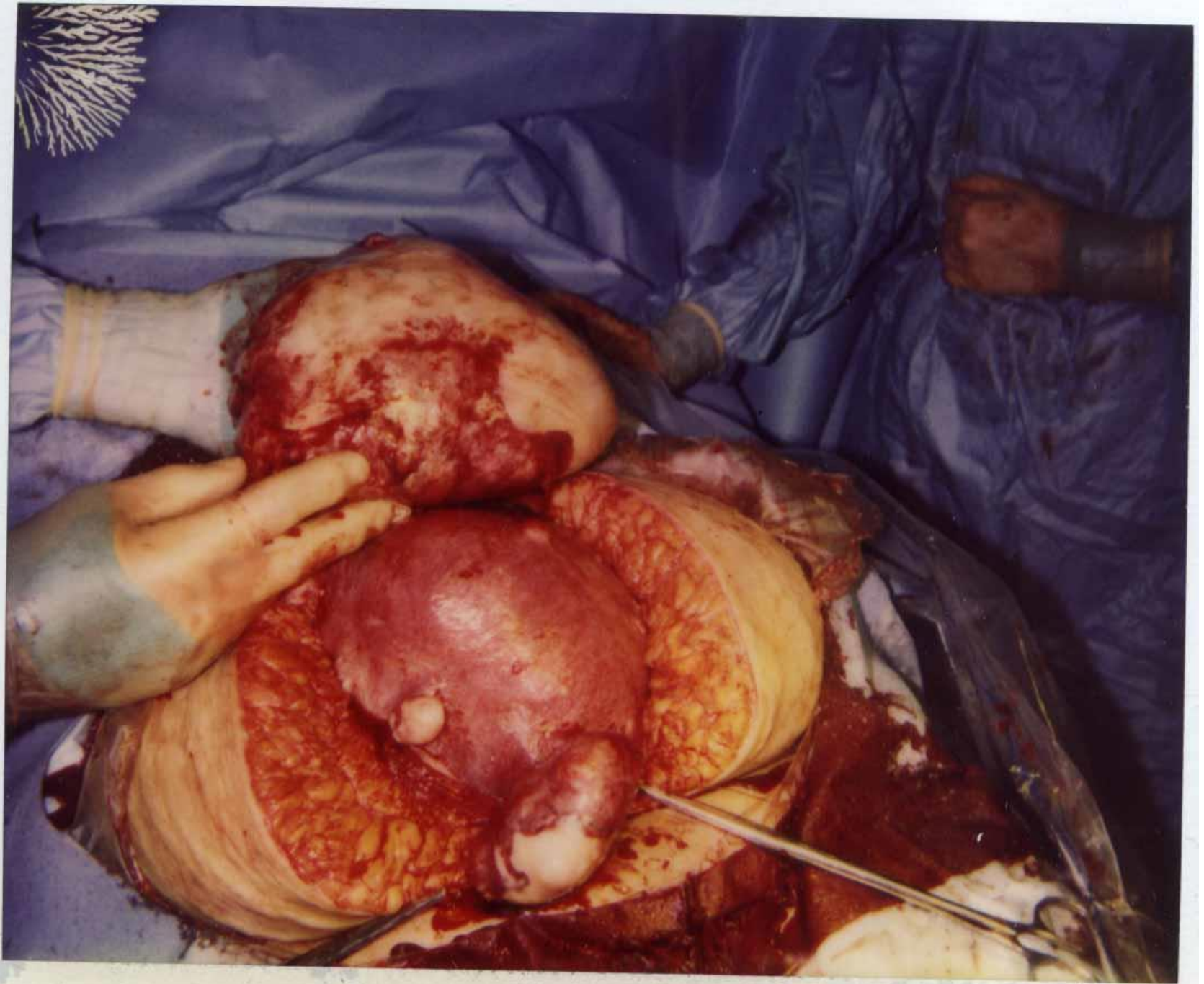
Do fibroids cause acute bleeding?

- Sub mucosal
- Cervical



Do fibroids cause acute pain?

- Degeneration (pregnancy, age, >10cm)
- Pedunculated
- Pressure symptoms

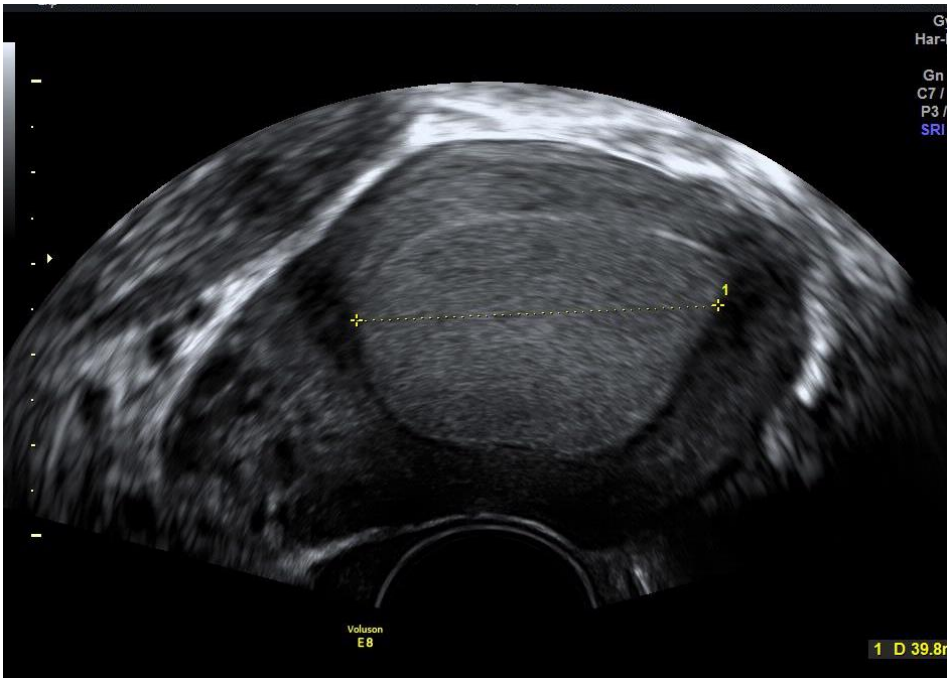
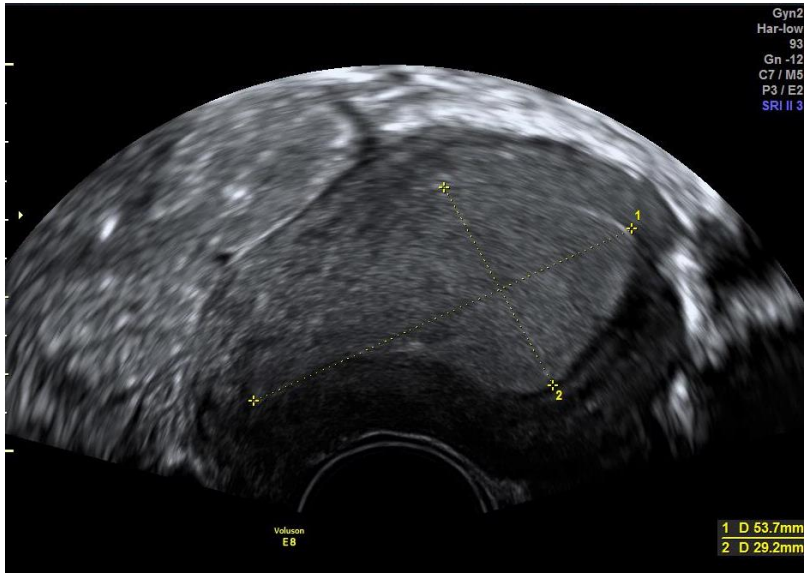


Adenomyosis / Endometriosis

- Acute on chronic pain
- Timing

Haematometra

- Cyclical pain
- Secondary amenorrhoea
- History of surgery (trachelectomy / LLETZ)
- NB Breastfeeding

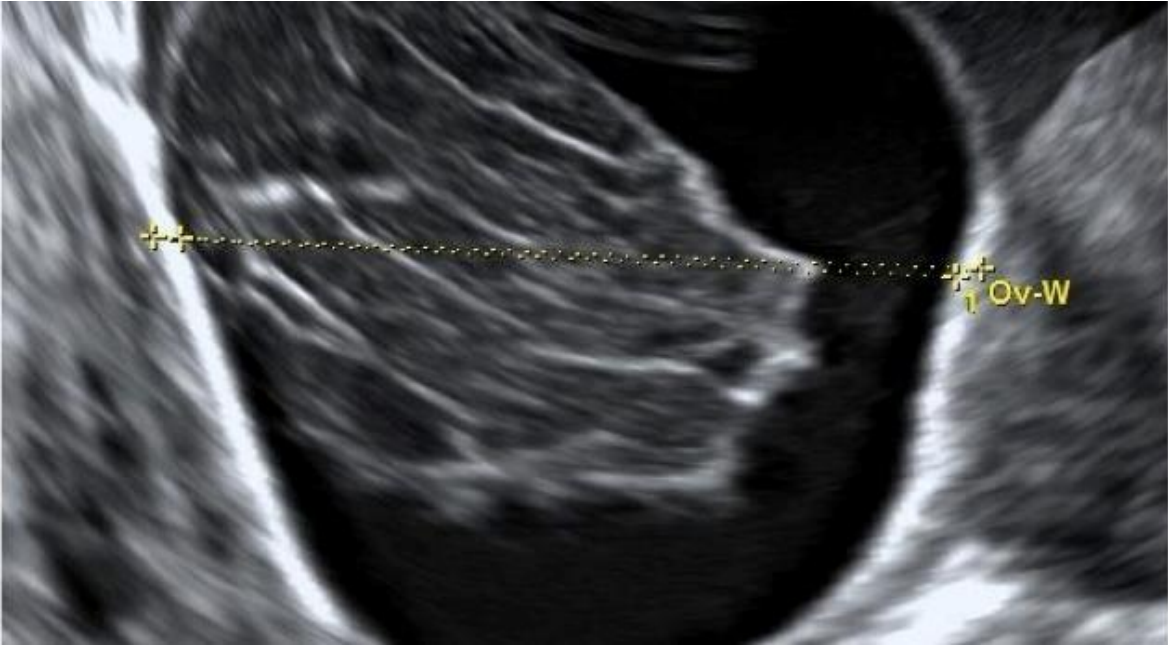
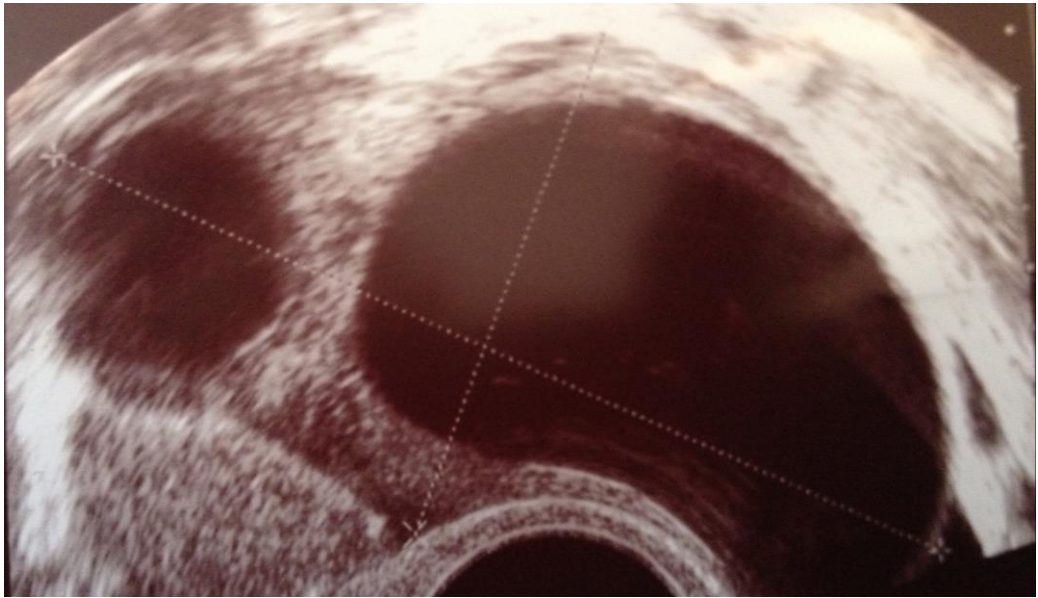


Haematocolpos

- Mid teens
- Primary amenorrhoea
- Cyclical pain
- Imperforate hymen
- T/A Scan

Ovarian Cyst “Accidents”

- Simple → haemorrhagic → resolution
- Mittelschmerz
- Corpus albicans

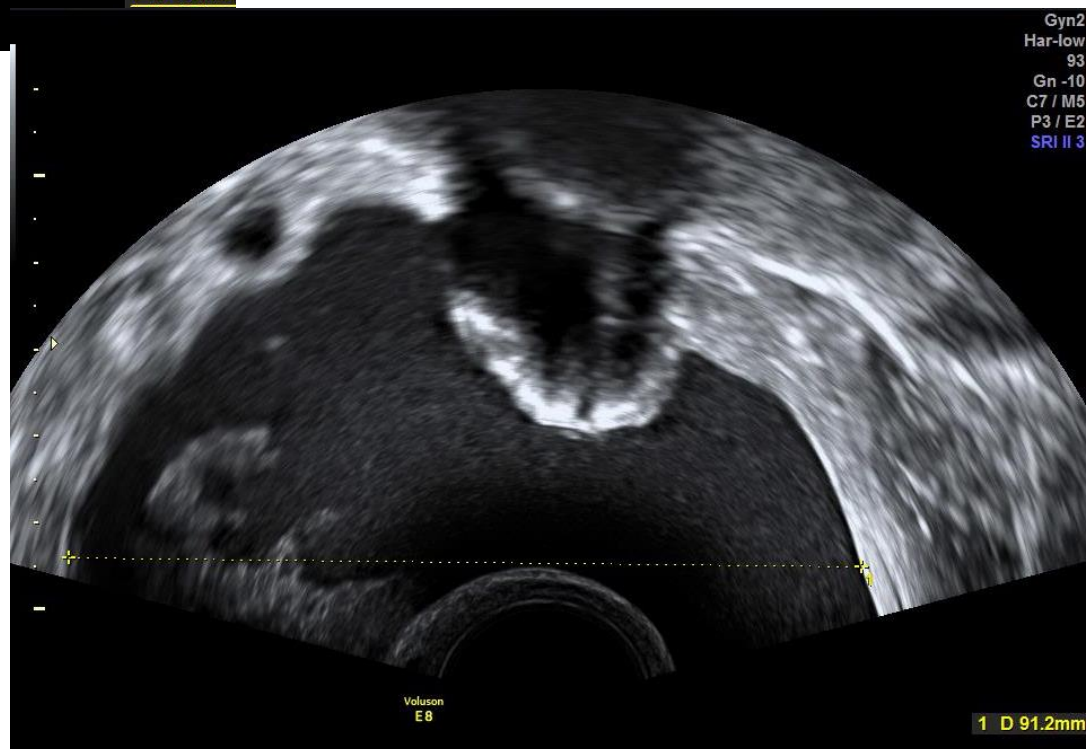
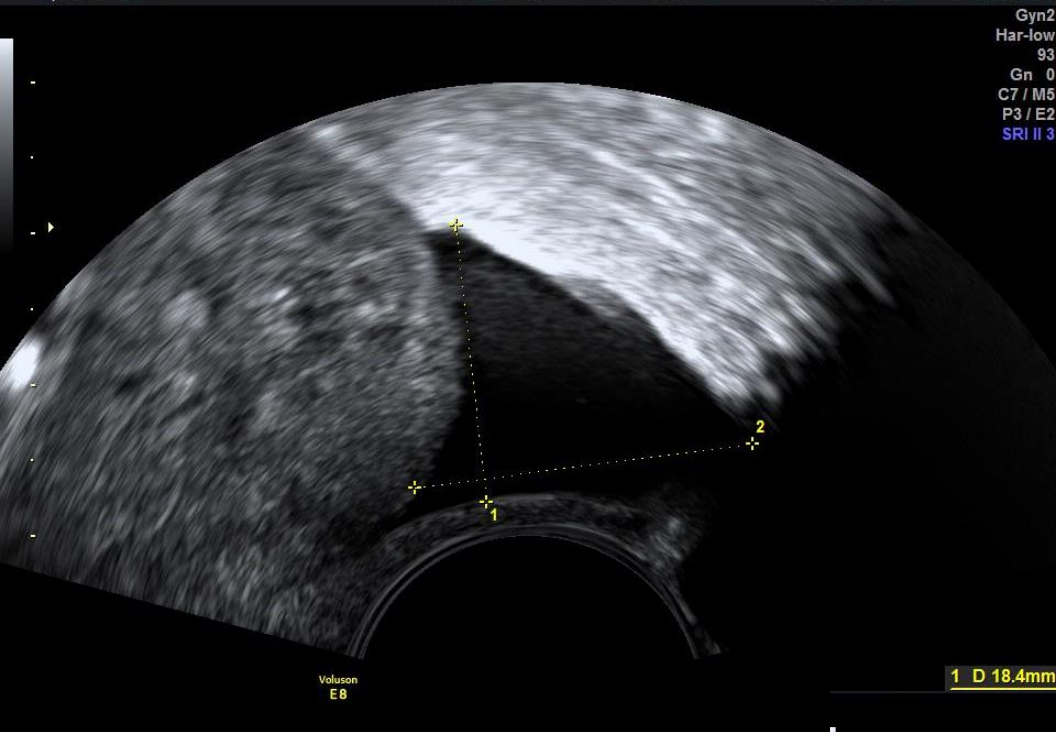


Gyn2
Har-low
93
Gn -10
C7 / M5
P3 / E2
SRI II 3



Voluson
E8

1 D 9.4mm



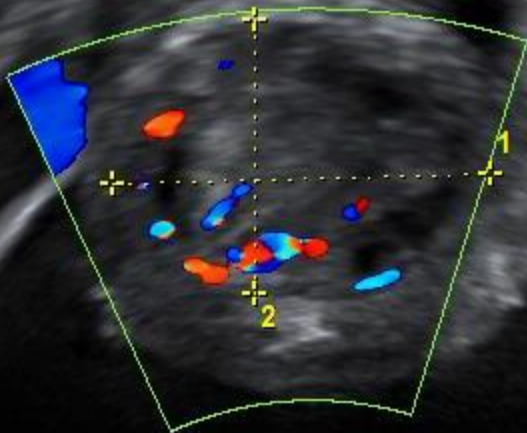
6cm/s



-6cm/s

Gyn2
Har-low
93
Gn -10
C7 / M5
P3 / E2
SRI II 3

100Ω
Gn -3.6
Frq mid
Qual norm
WMF low1
PRF 0.9kHz



Voluson
E8

1 D 31.8mm
2 D 23.0mm

Gyn2
Har-low
93
Gn -10
C7 / M5
P3 / E2
SRI II 3



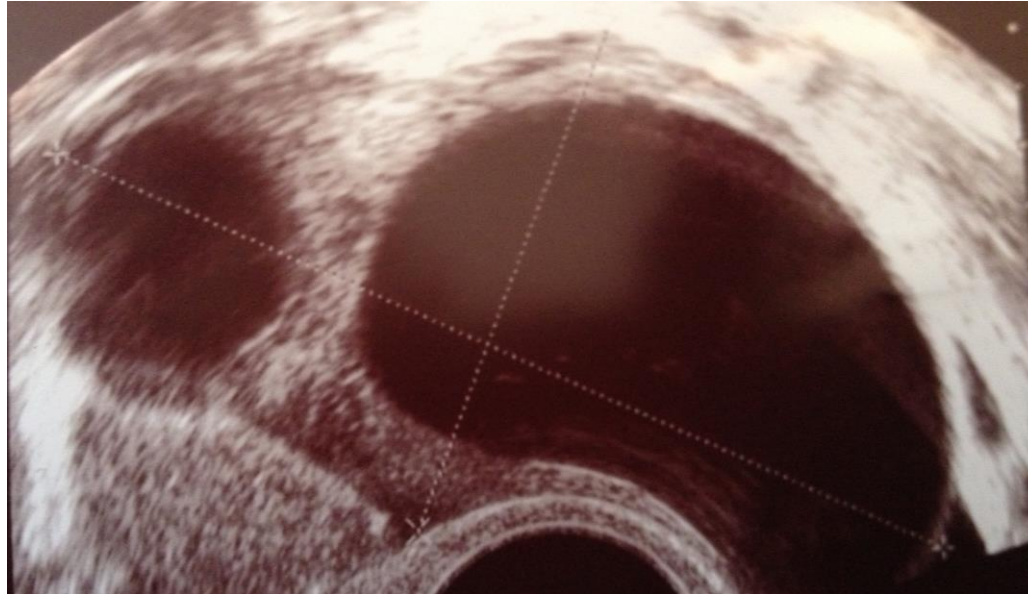
Voluson
E8

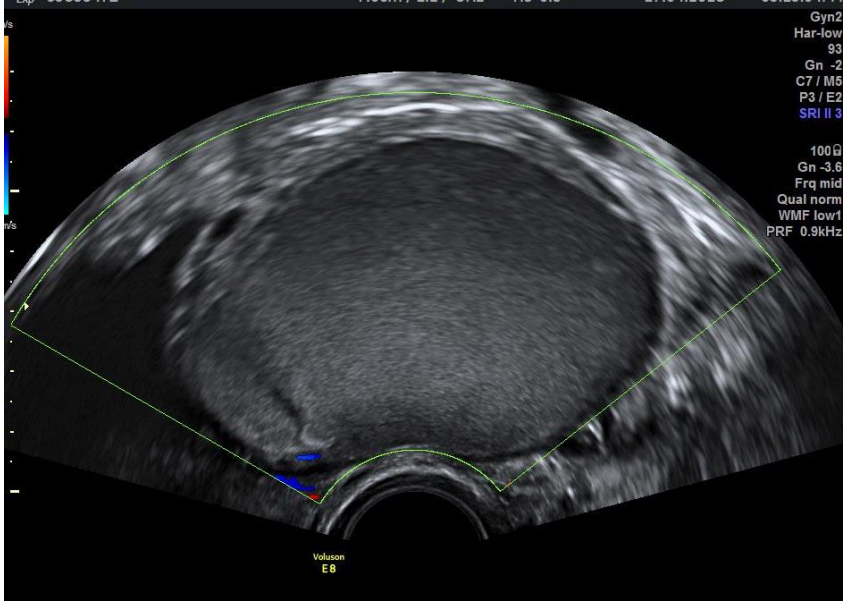
1 D 65.7mm

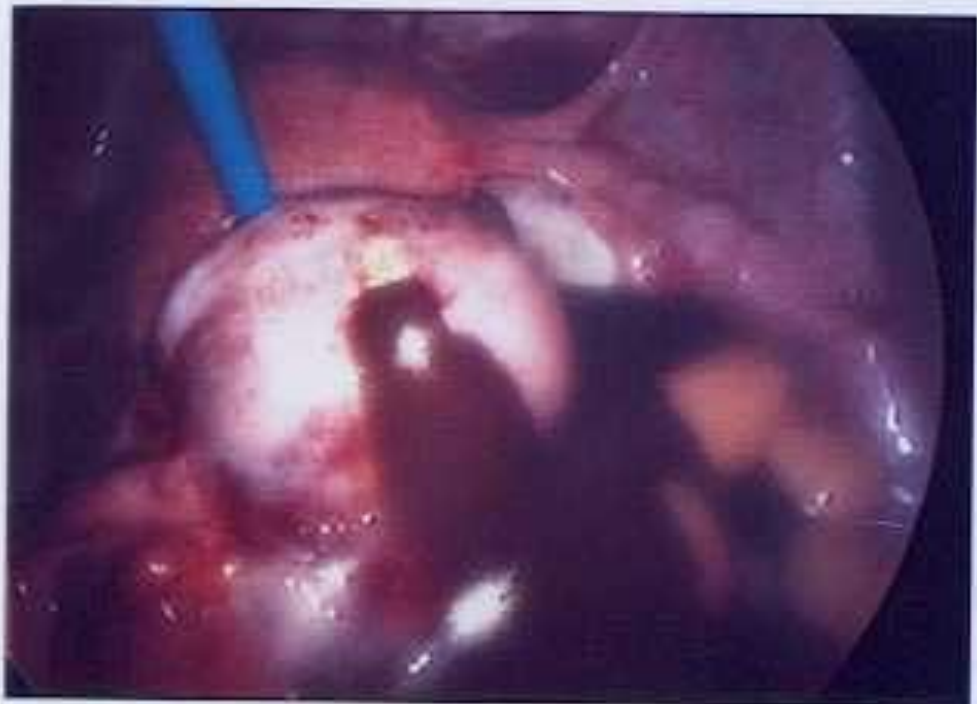
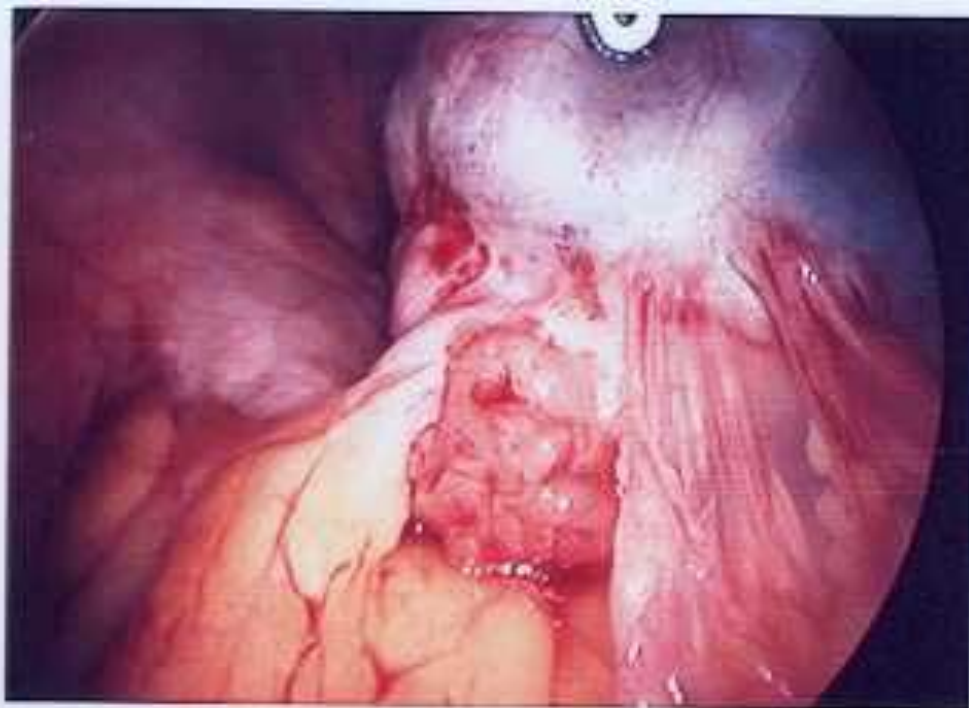
Ovarian Torsion

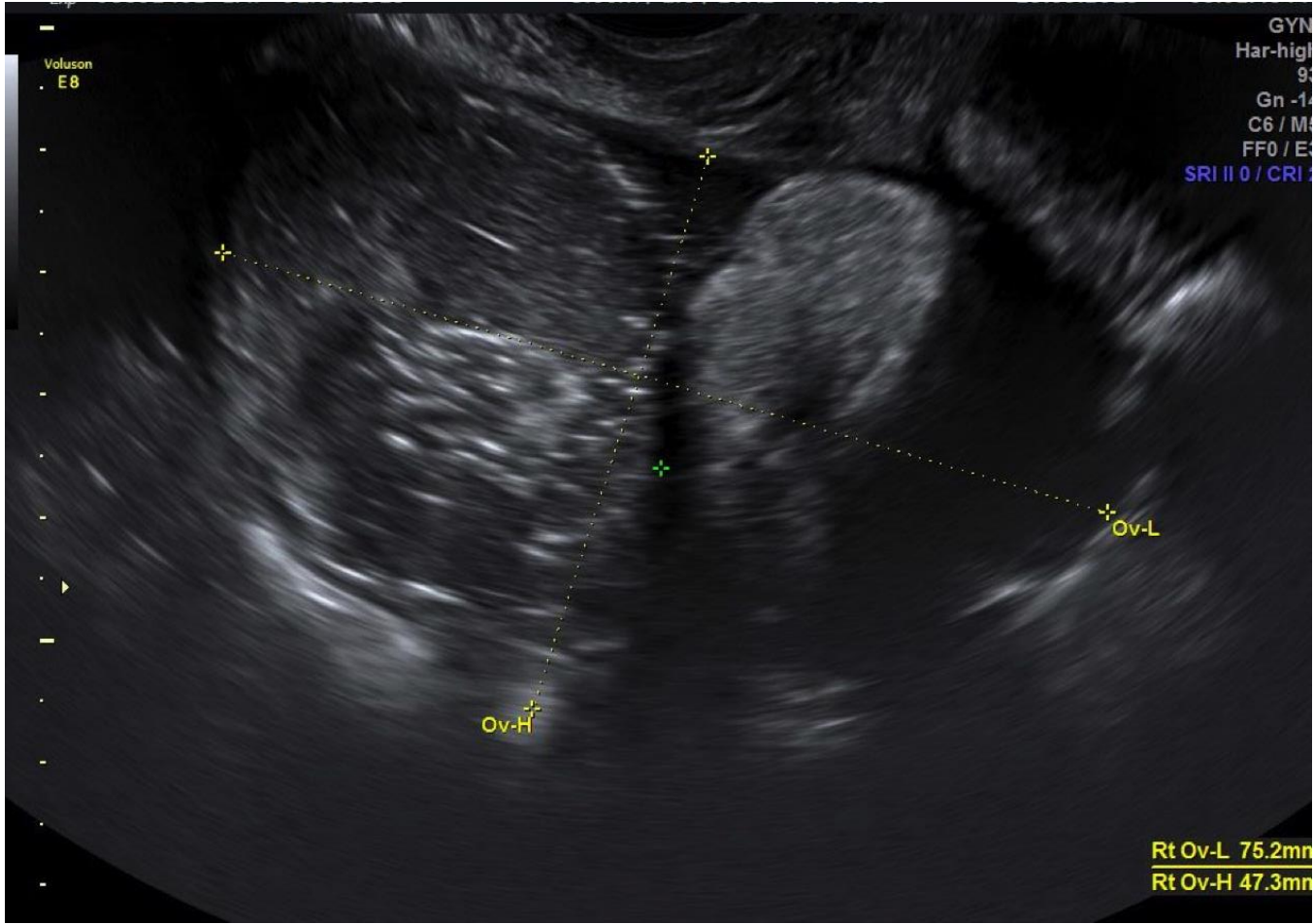
- Acute, ischaemic pain
- Nausea / vomiting
- “Cannot straighten legs”
- Raised WCC, CRP, Temp.

Which cysts tort?









Voluson
EB

GYN
Har-high
93
Gn -14
C6 / M
FF0 / E
SRI II 0 / CRI 1

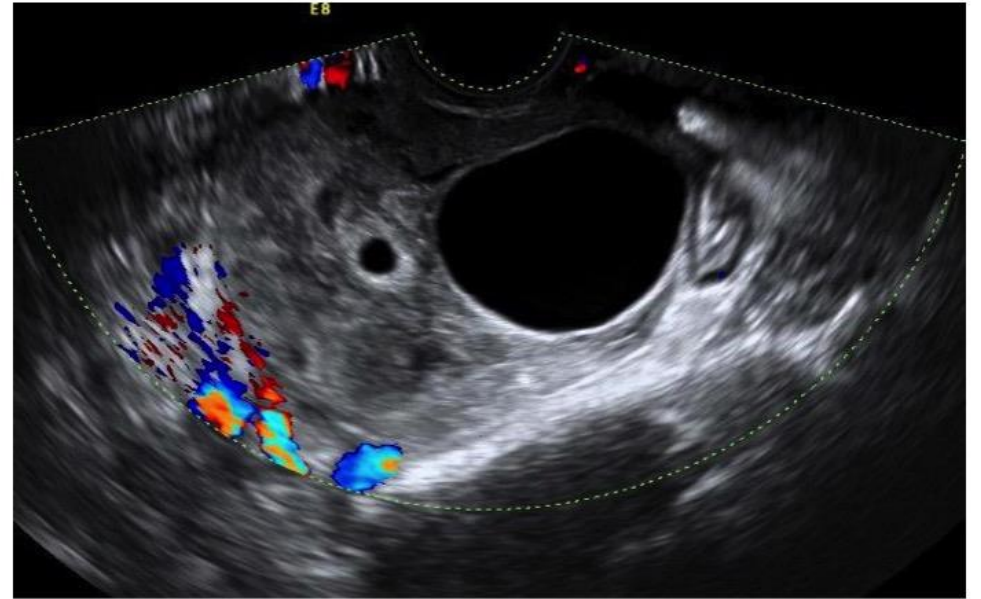
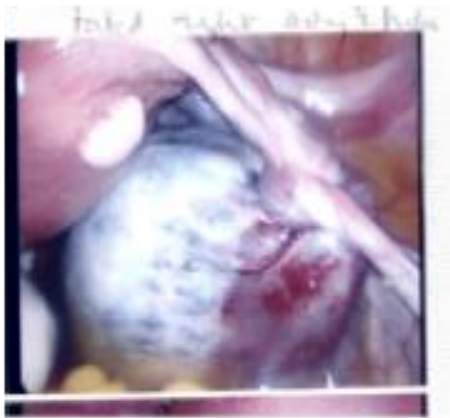
Ov-L

Ov-H

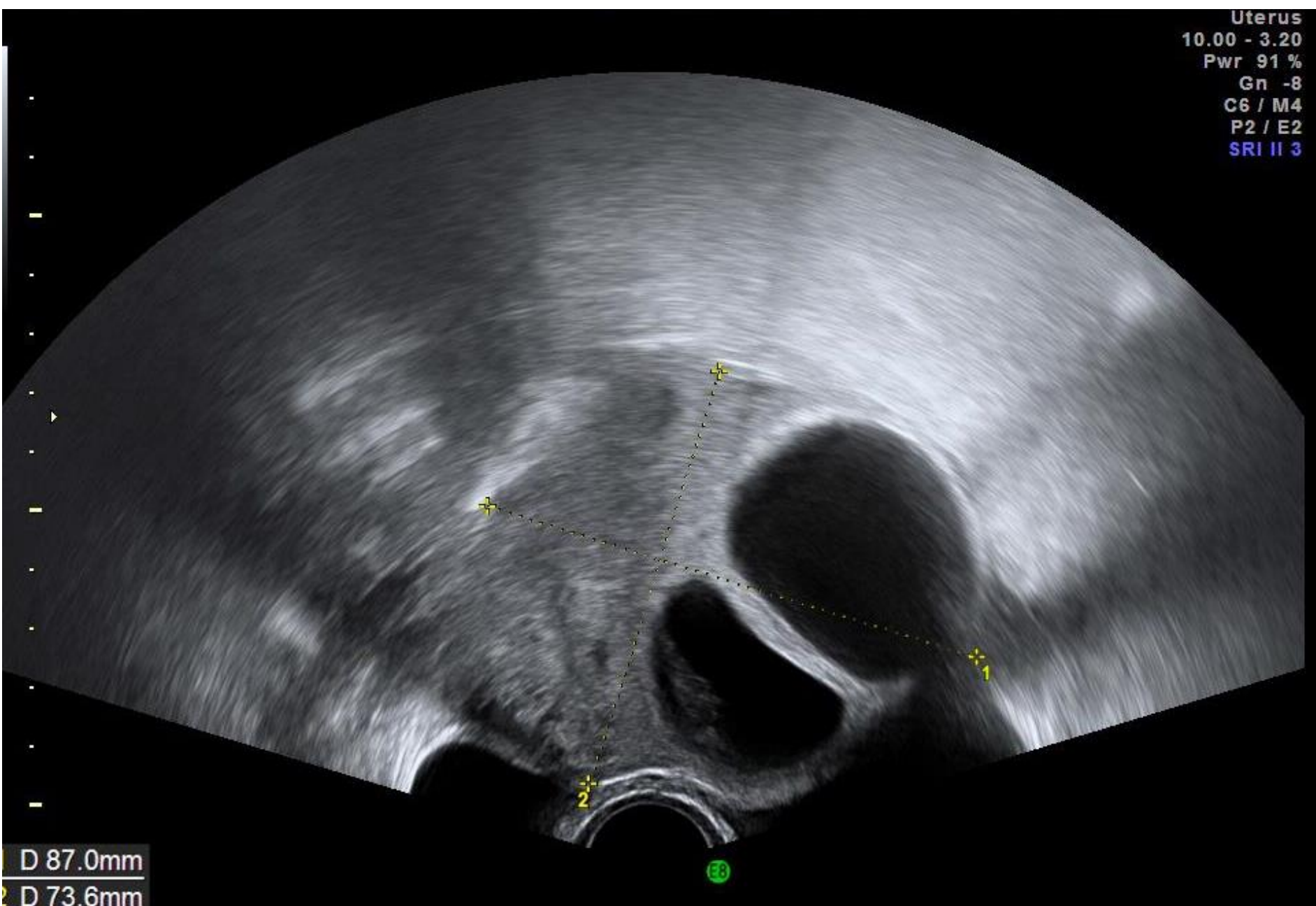
Rt Ov-L 75.2mm
Rt Ov-H 47.3mm

Signs of torsion

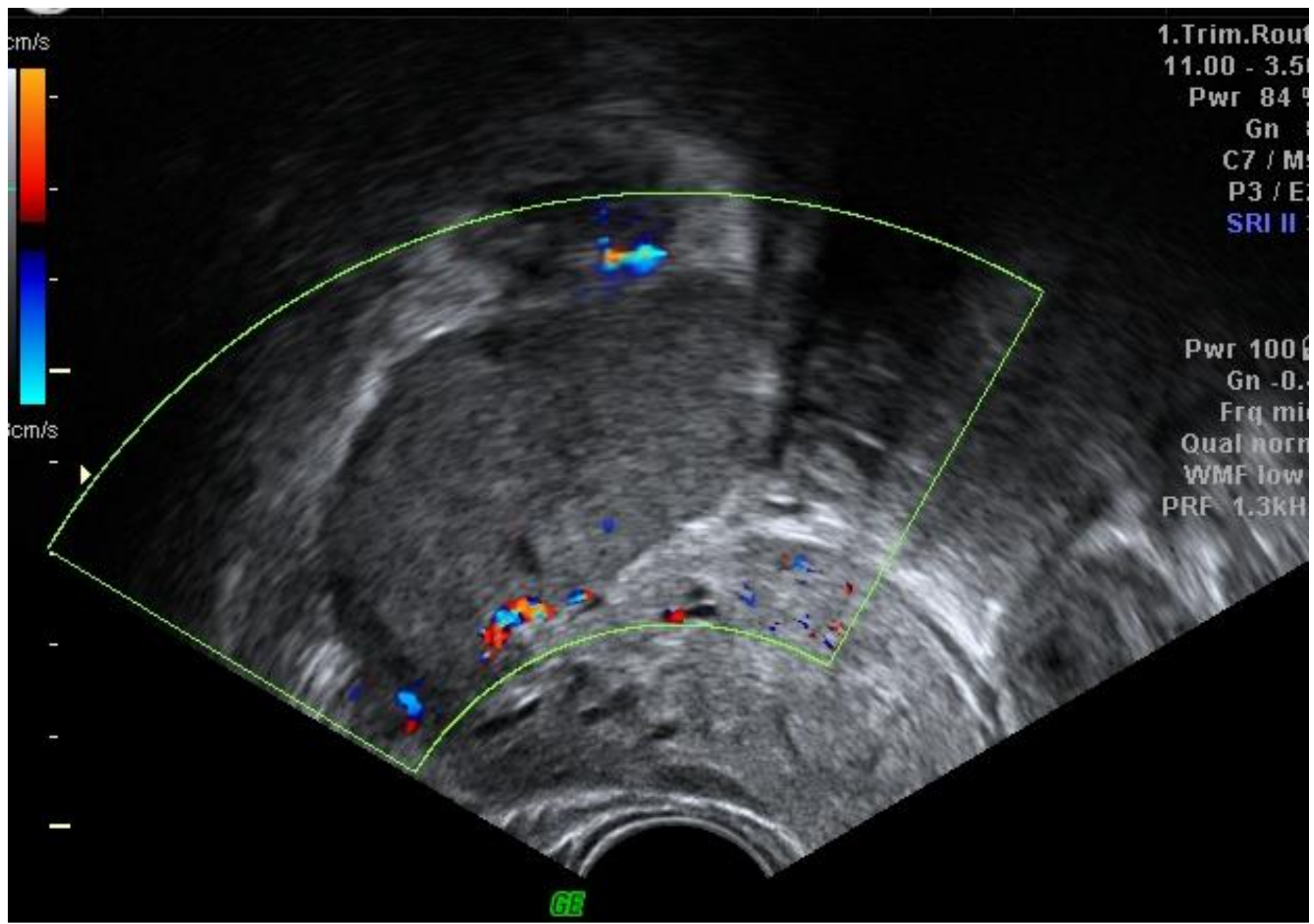
- Unilateral increase in size (cf other side)
- Stromal oedema
- Follicles seem congested / “too round”
- Peripheral displacement of ovarian follicles
- Asymmetric thickening of ovarian wall cysts
- Abnormal situation of ovary – midline /anterior to uterus
- Little / no intra-ovarian venous flow



Uterus
10.00 - 3.20
Pwr 91 %
Gn -8
C6 / M4
P2 / E2
SRI II 3



D 87.0mm
D 73.6mm



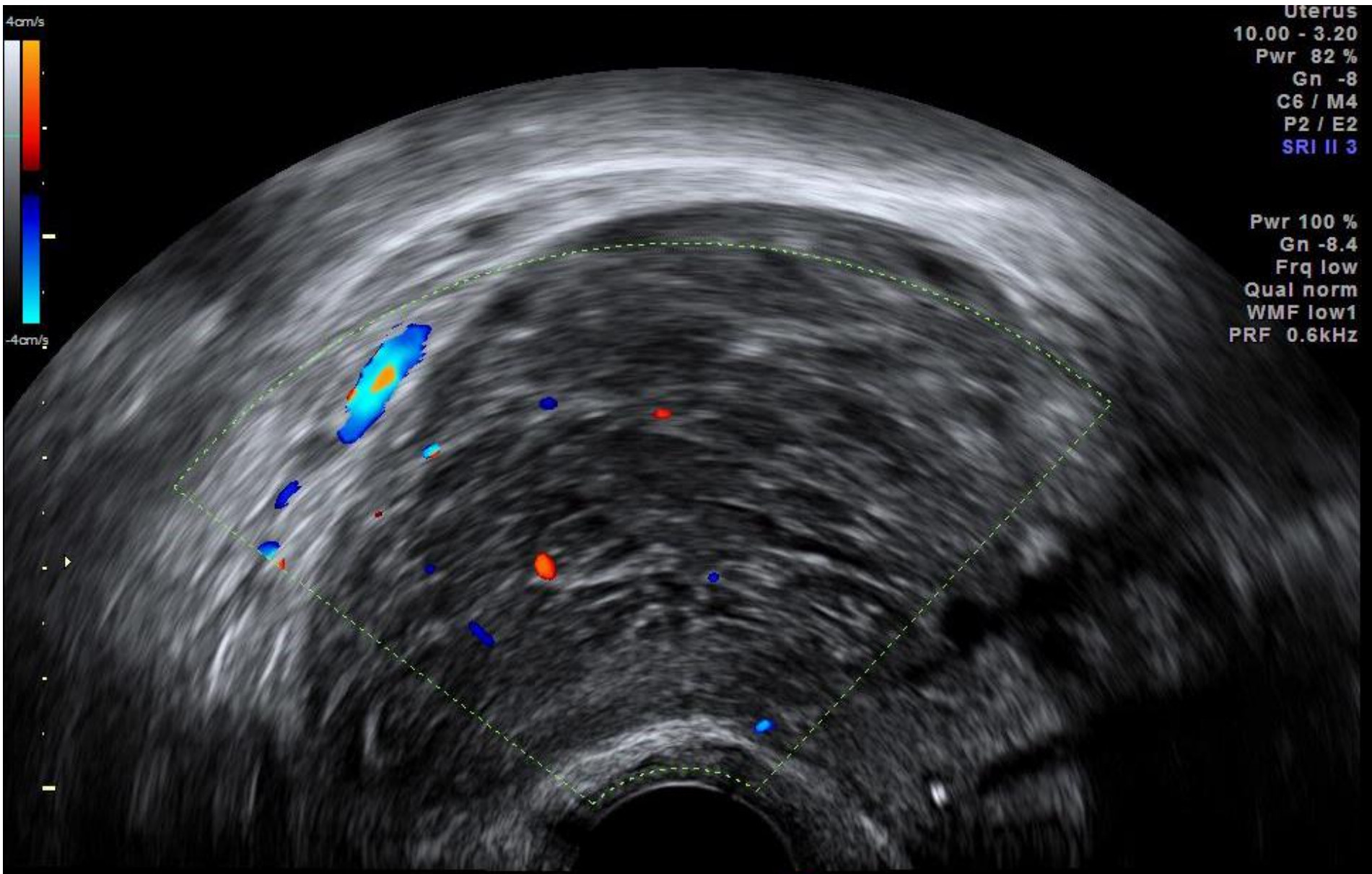
4cm/s



-4cm/s

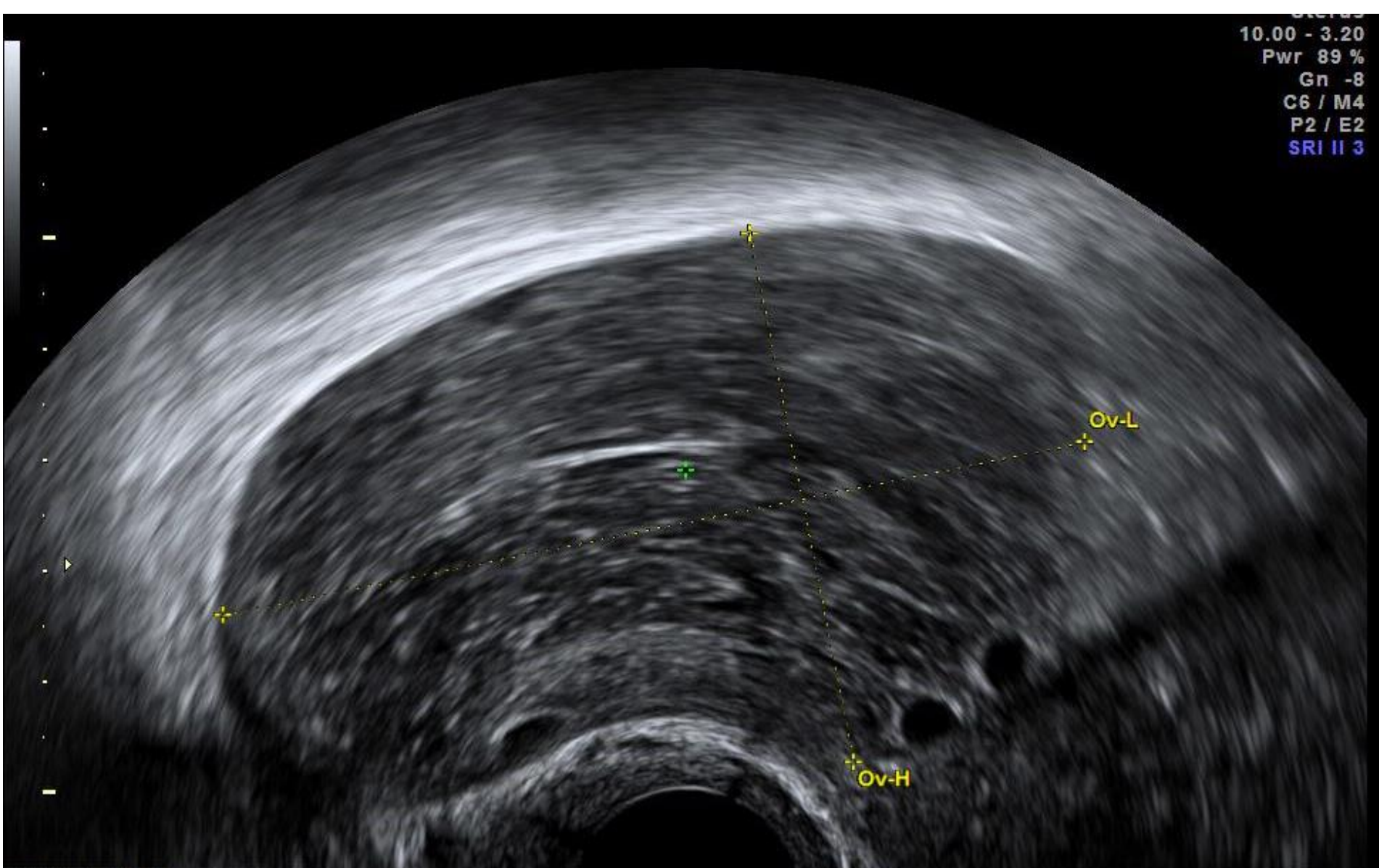
Uterus
10.00 - 3.20
Pwr 82 %
Gn -8
C6 / M4
P2 / E2
SRI II 3

Pwr 100 %
Gn -8.4
Frq low
Qual norm
WMF low1
PRF 0.6kHz



13

10.00 - 3.20
Pwr 89 %
Gn -8
C6 / M4
P2 / E2
SRI II 3



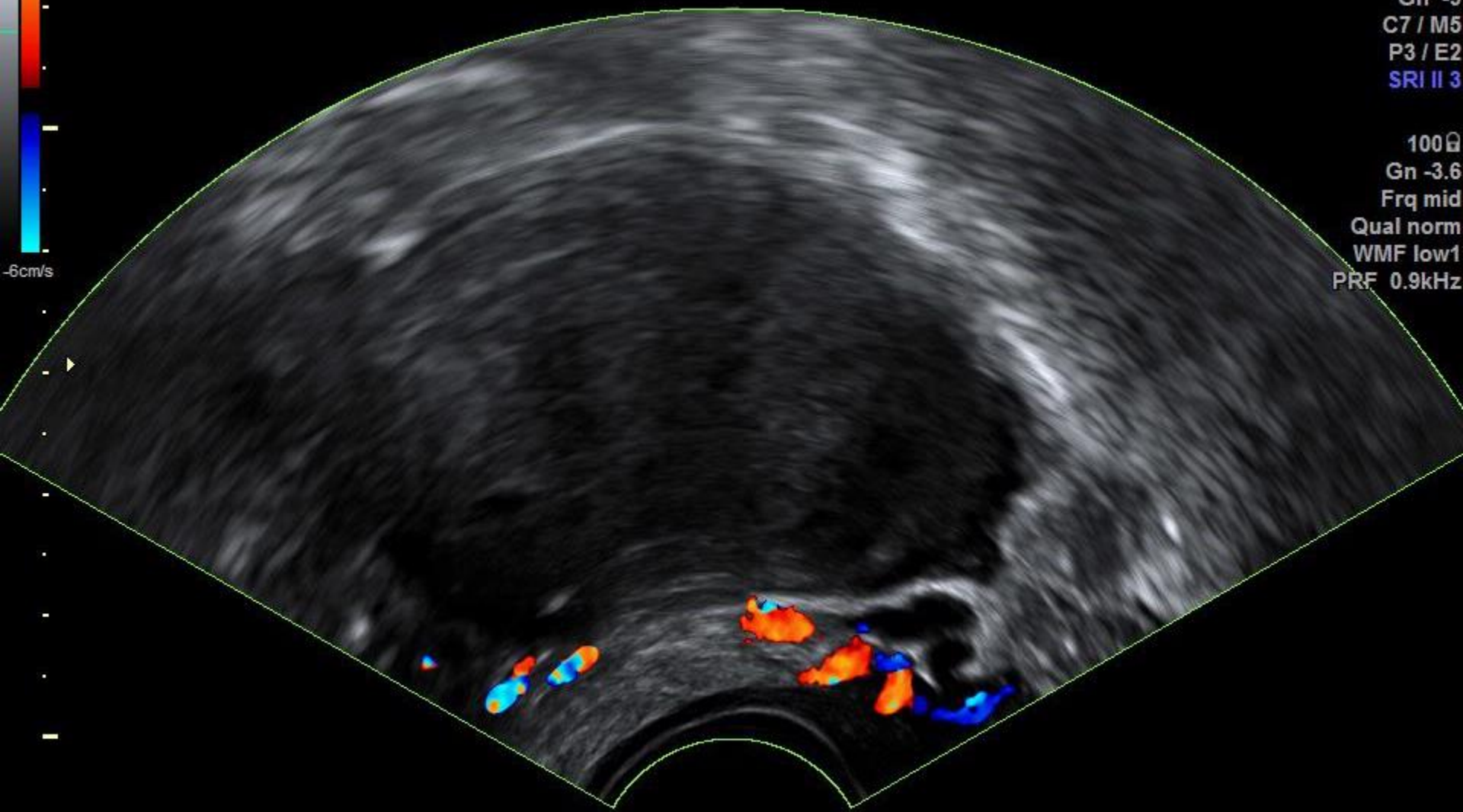
Rt Ov-L 7.94cm
Rt Ov-H 4.87cm

3

6cm/s



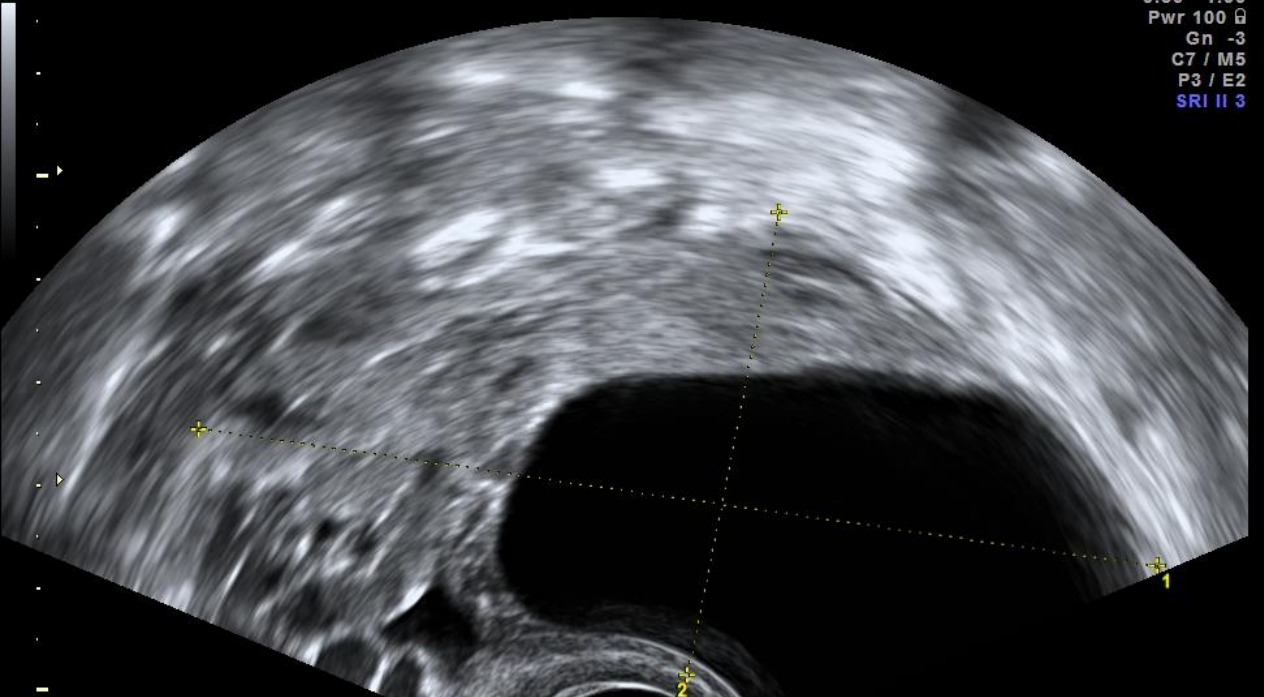
-6cm/s

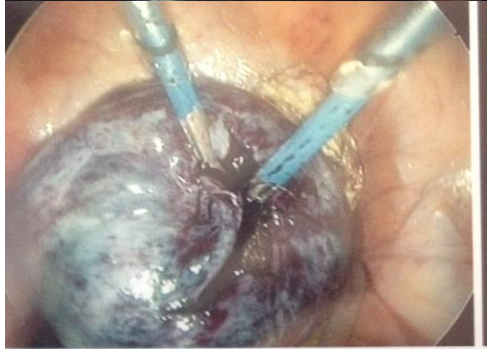
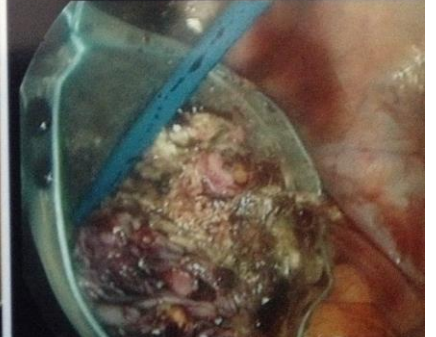
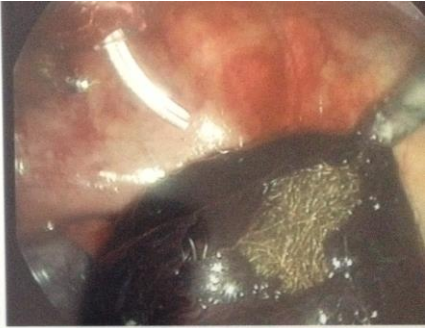
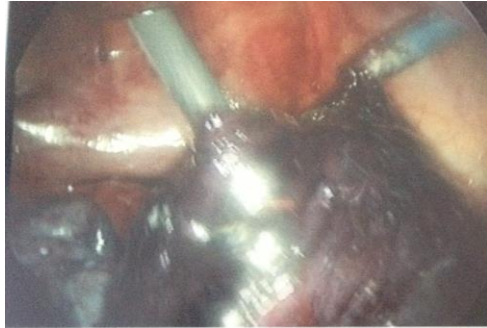
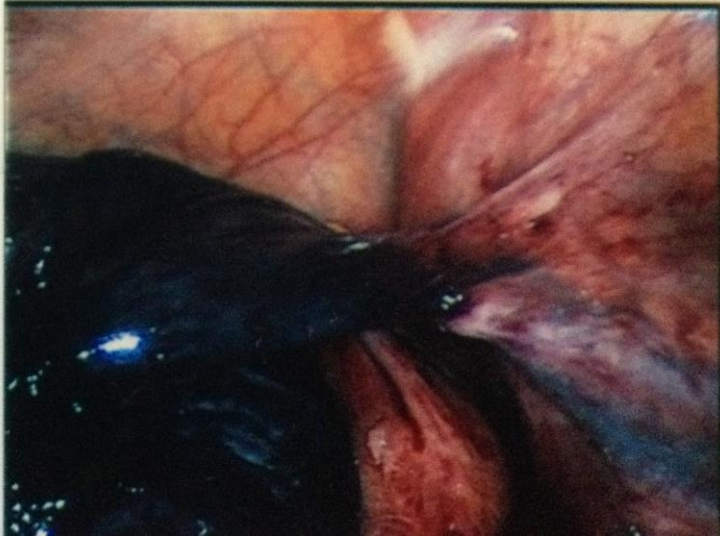


Gynz
Har-low
93
Gn -9
C7 / M5
P3 / E2
SRI II 3

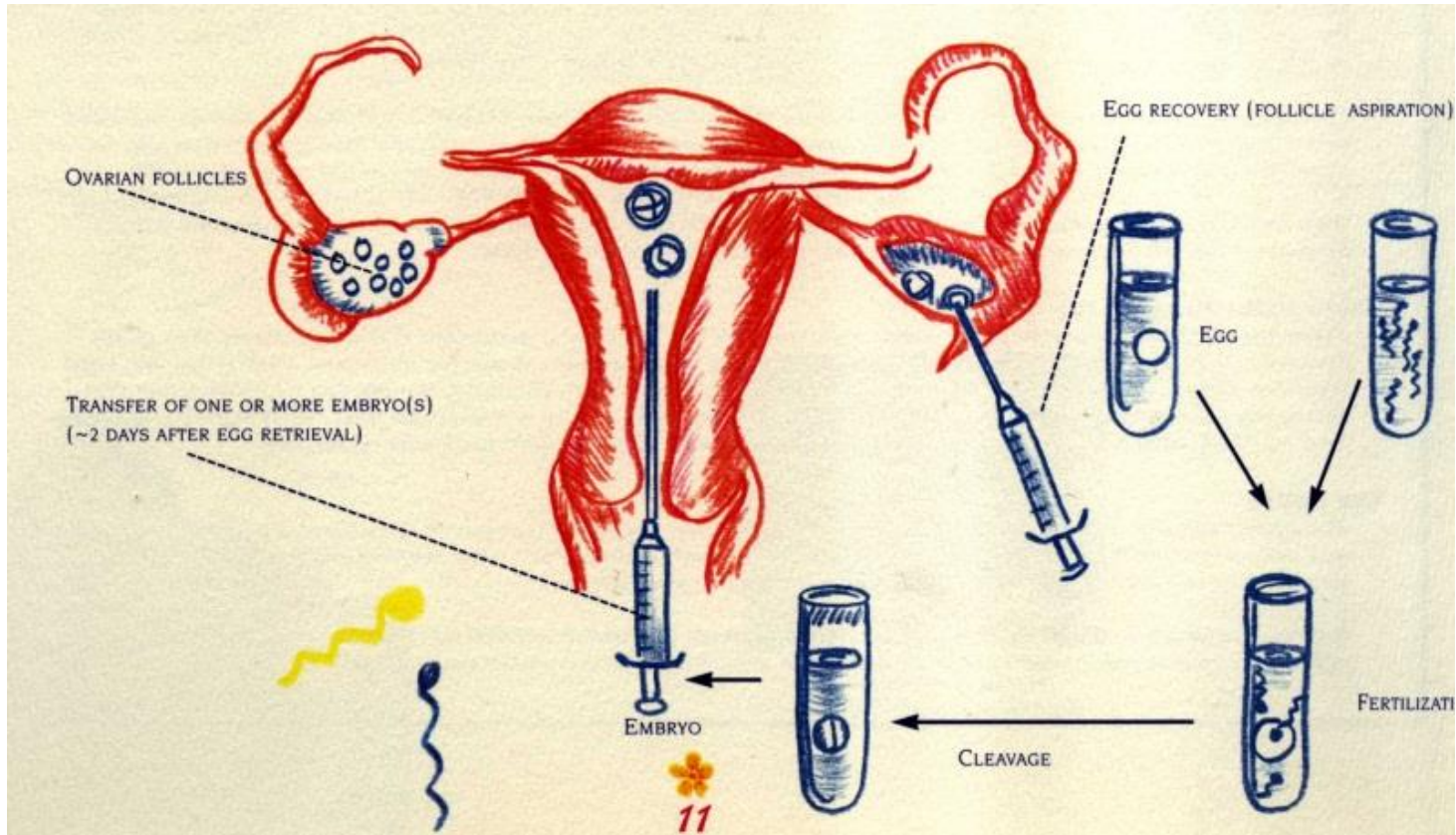
100Ω
Gn -3.6
Frq mid
Qual norm
WMF low1
PRF 0.9kHz

Voluson
E8

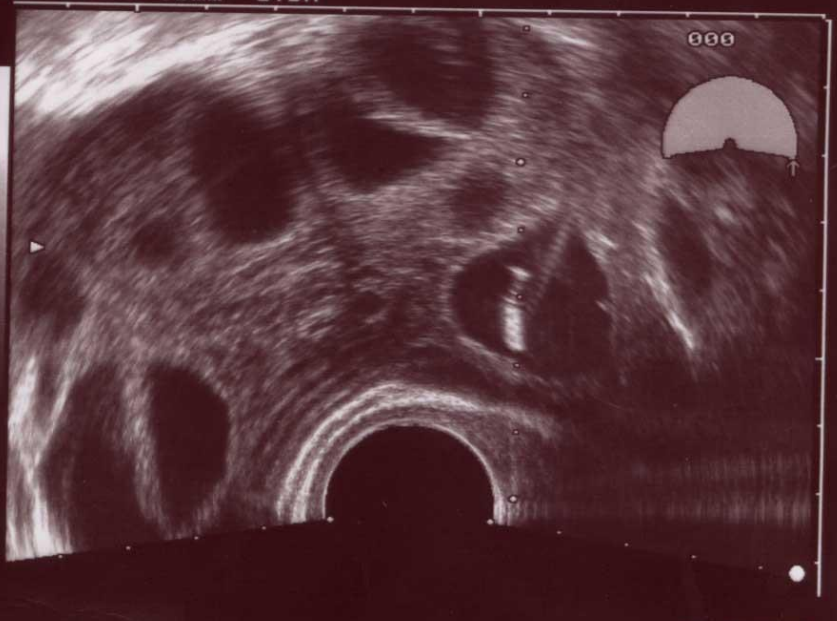




Assisted conception patients



HITACHI BG:9 DYN:70 P:2/2/1/A
PWR:M FR:16 SCC:7 85mm 6.5M



ID:
26-MAR-03 F4
10:54:33

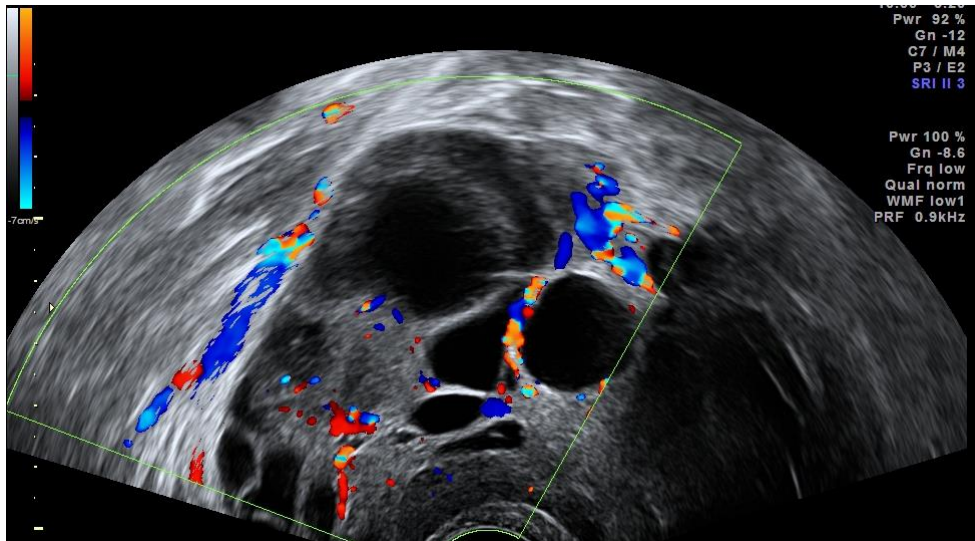
GUYS/ST THOMAS

REVIEW [Icons] SOB [Icons] AREA-E [Icons]

Name:
Sex: Age:
D.O.B.:
16/03/2013
13:59:55
CVP:B1/1
Cr:N Eht:A5
Media: [Icons]

Physician:
Comment:

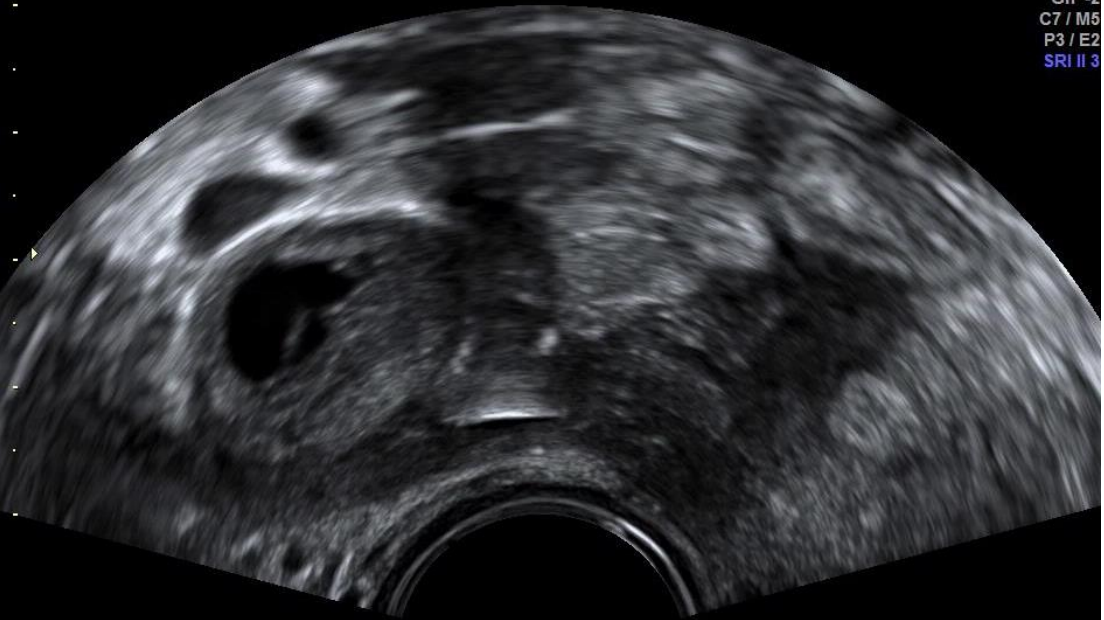




Coils

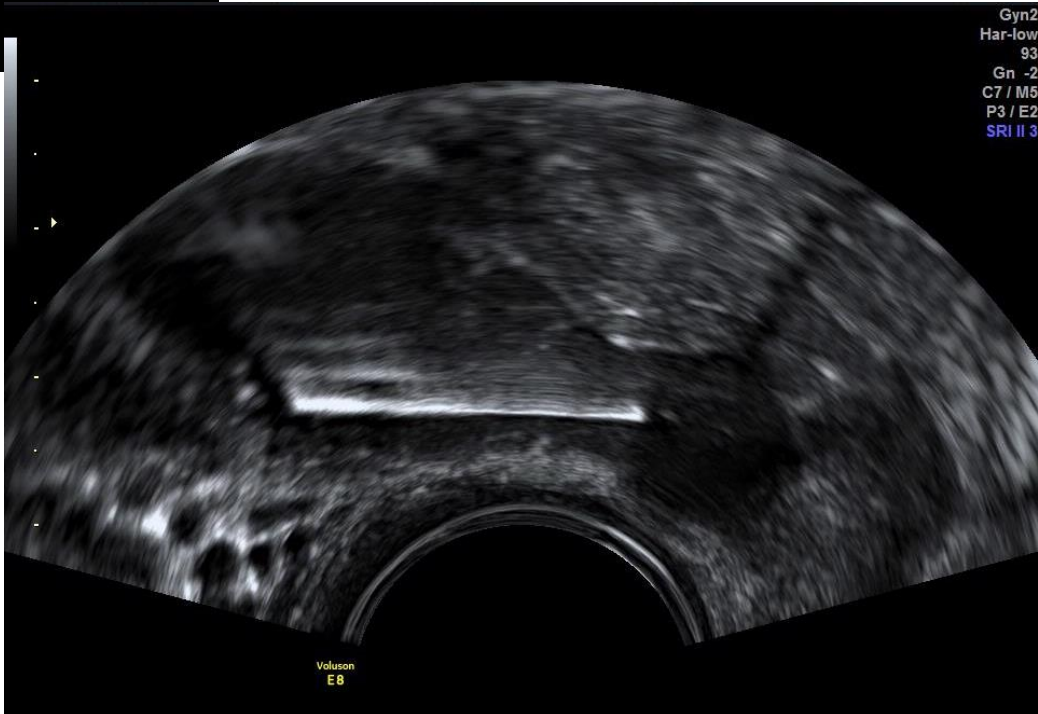


Gyn2
Har-low
93
Gn -2
C7 / M5
P3 / E2
SRI II 3



Voluson
E8

Gyn2
Har-low
93
Gn -2
C7 / M5
P3 / E2
SRI II 3



Voluson
E8

Pelvic Inflammatory Disease

Tubo-ovarian abscesses

- Clinical context
- Raised inflammatory markers (WCC, CRP)
- Pain on scanning
- Discharge on probe

Gyn2
Har-low
93
Gn -7
C7 / M5
P3 / E2
SRI II 3



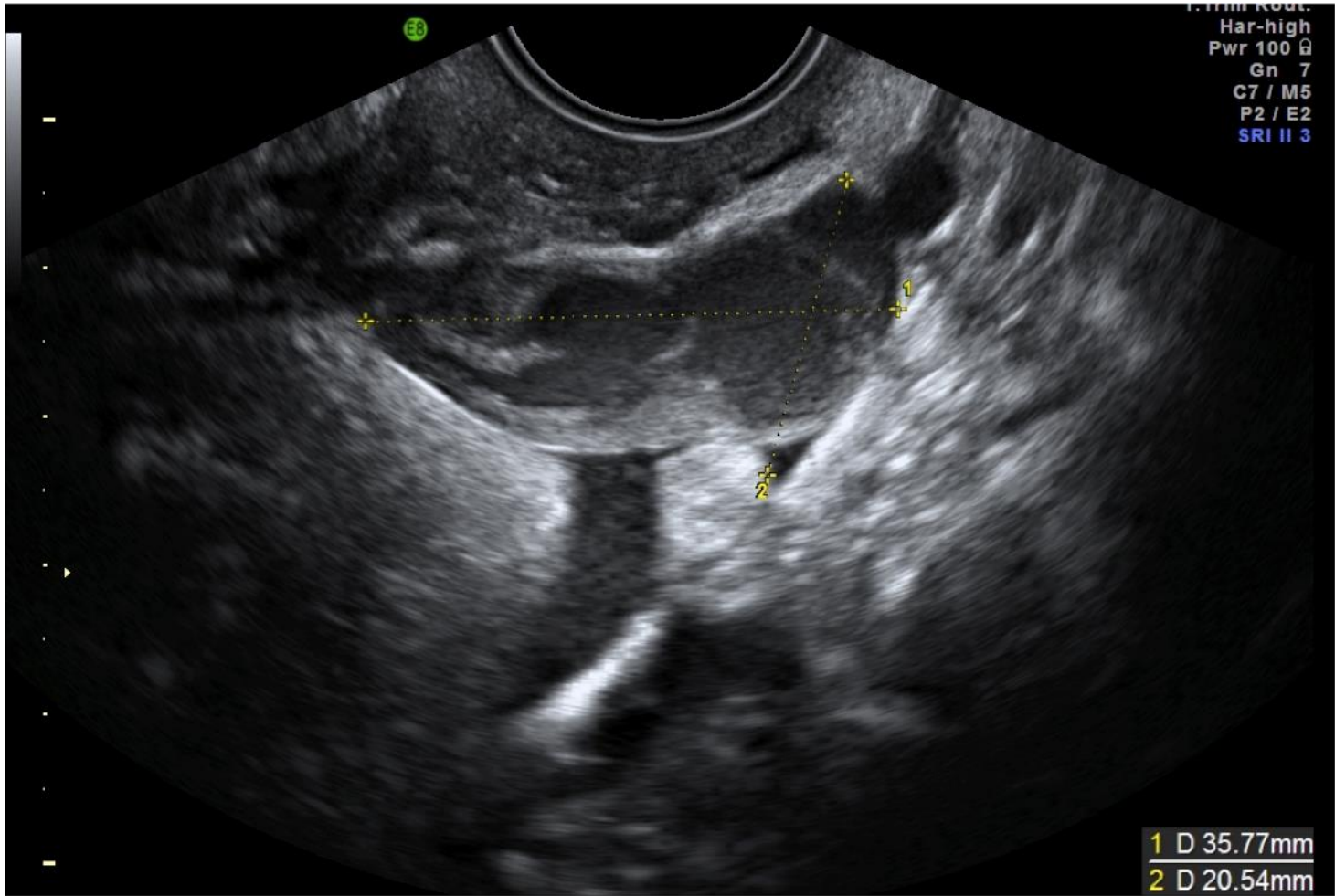
Voluson
E8

1 D 9.3mm
2 D 6.8mm

Uterus
10.00 - 3.20
Pwr 91 %
Gn -6
C6 / M4
P2 / E2
SRI II 3



E8



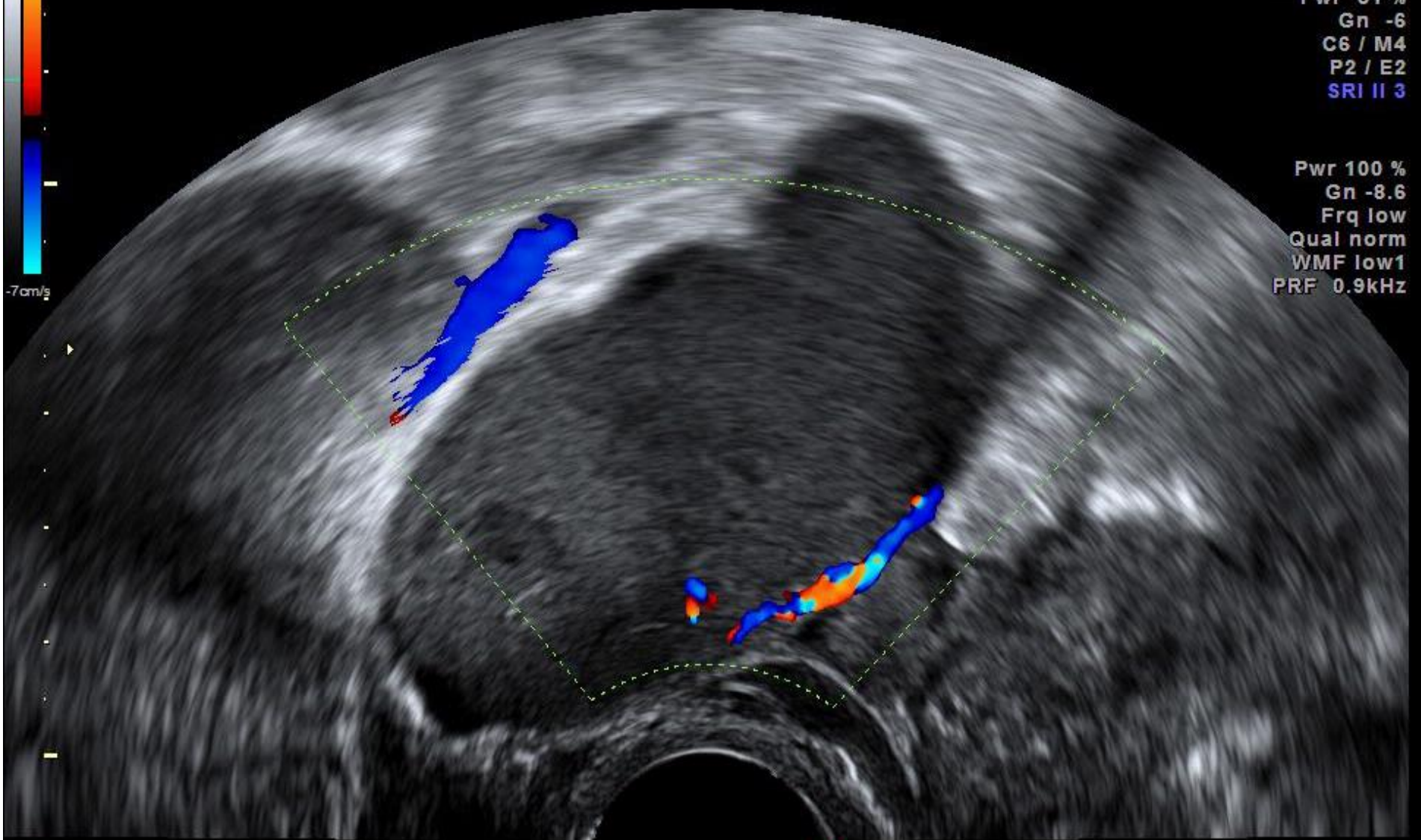
7cm/s



-7cm/s

uterus
10.00 - 3.20
Pwr 81 %
Gn -6
C6 / M4
P2 / E2
SRI II 3

Pwr 100 %
Gn -8.6
Frq low
Qual norm
WMF low1
PRF 0.9kHz



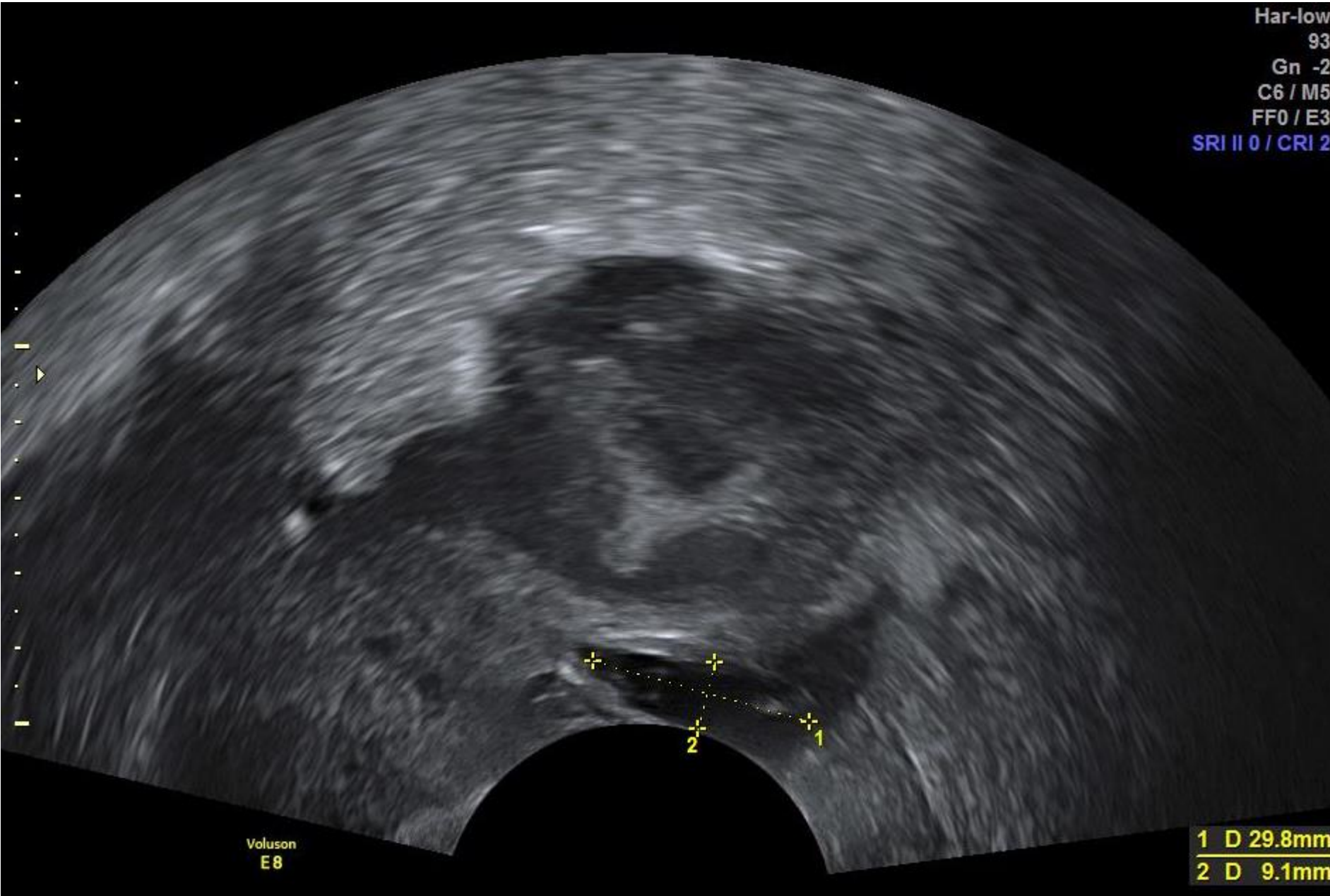
53

uterus
10.00 - 3.20
Pwr 89 %
Gn -8
C6 / M4
P2 / E2
SRI II 3

1 D 133.8mm
2 D 78.6mm

E8

Har-low
93
Gn -2
C6 / M5
FF0 / E3
SRI II 0 / CRI 2



Voluson
E8

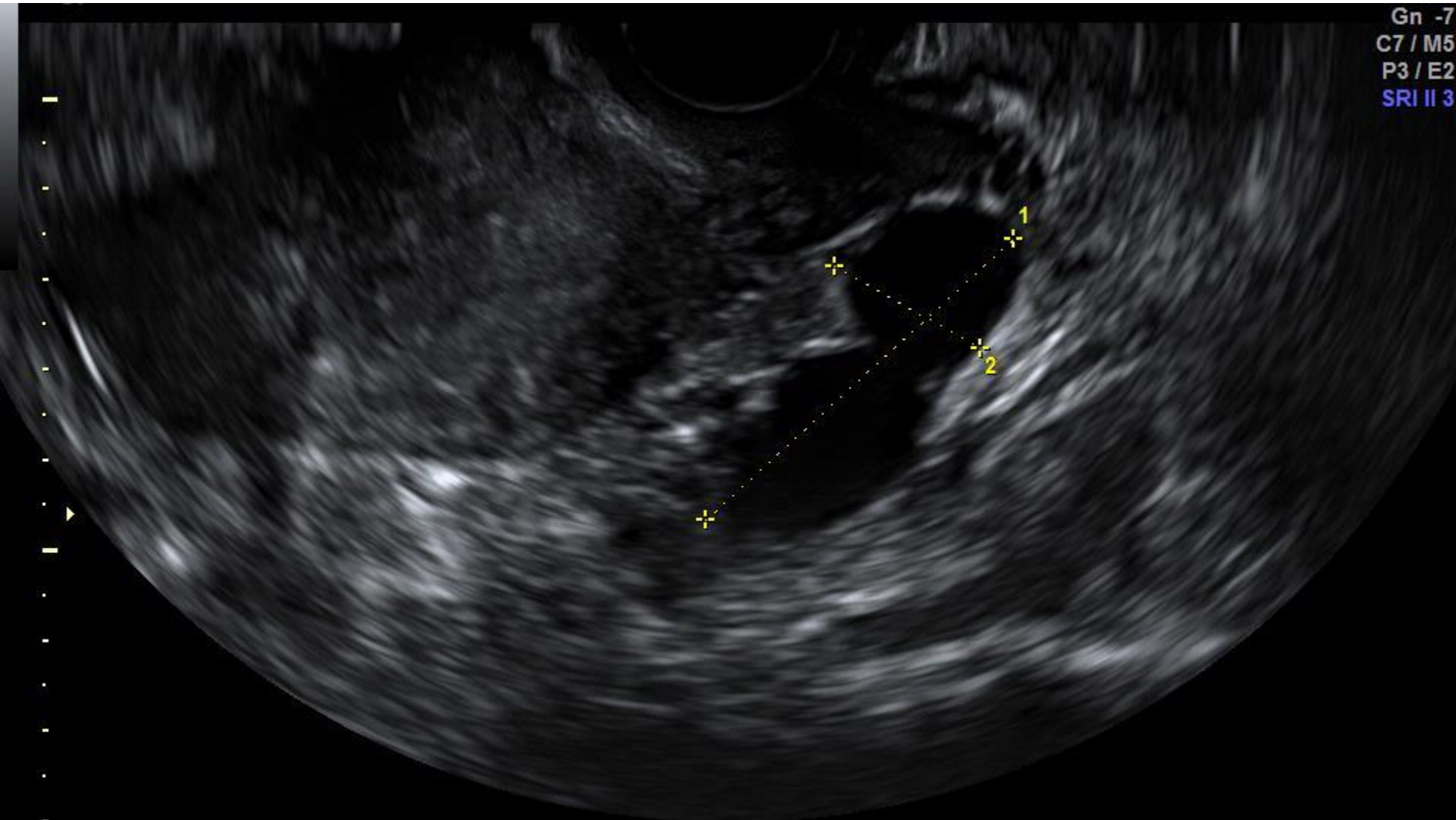
1 D 29.8mm
2 D 9.1mm

Uterus
10.00 - 3.20
Pwr 100 $\bar{\mu}$
Gn -12
C7 / M4
P3 / E2
SRI II 3



EB

Gn -7
C7 / M5
P3 / E2
SRI II 3

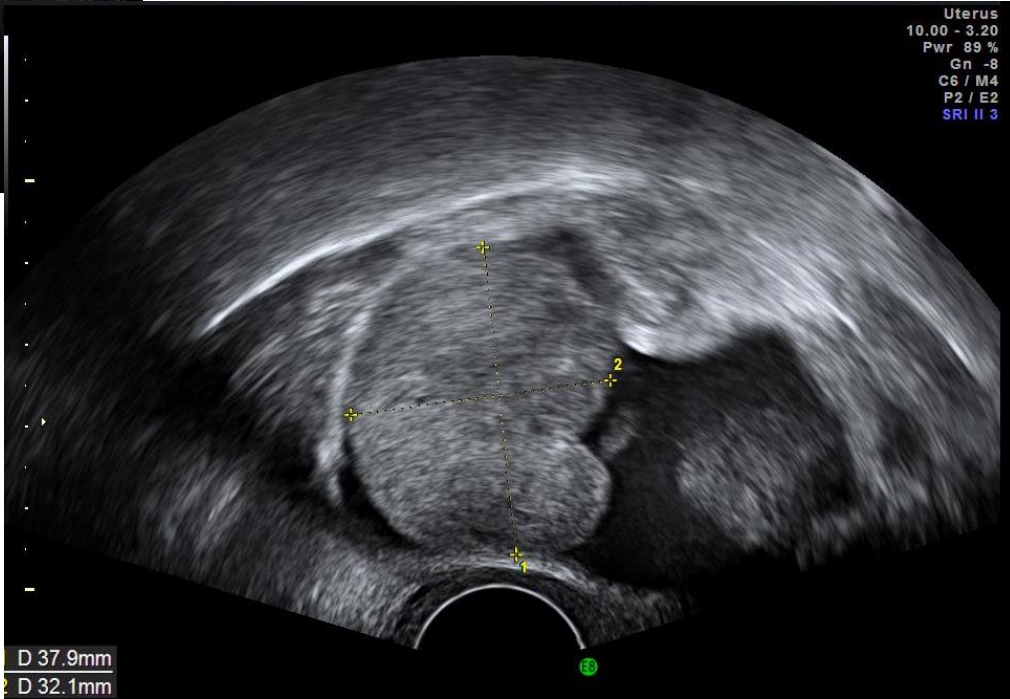
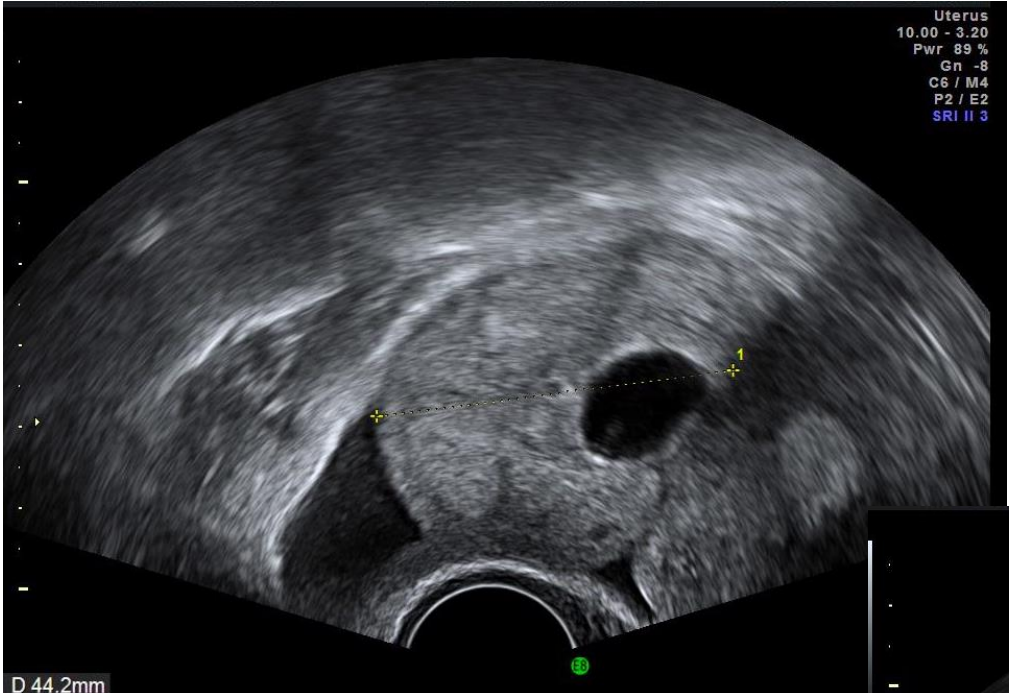


1 D 46.2mm
2 D 18.5mm





Fallopian Tube Torsion



Conclusions

- Essential not useful
- Observe patient
- Clinical history
- Satisfaction of helping diagnose

