



# How to assess efficacy of medical induced abortion?

hCG < 500 UI/l new threshold :  
an easy and reproducible tool?

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# Agenda

- 1. Objective
- 2. Material and methods
- 3. Retrospective study
- 4. Prospective study
- 5. Quizz
- 6. Summary & path forward

# I. Objective

To evaluate the ability of a biological threshold (500UI/l) to predict efficacy of medical abortion

## 2. Material and methods (1/2)

Retrospective study on 1240 women, for whom a hCG measure was carried out, from D21 to D25:

- Women with  $\text{hCG} > 500 \text{ UI/l}$  were further called back for Transvaginal sonography (TVuS)

Double blinded prospective study on 112 women systematically followed up by TVS and biology from D21 to D25.

## 2. Material and methods (2/2)

- « medical abortion failure » is defined by: women who had a surgery evacuation
- FN stands for False Negative; FN are clinical failures who had been incorrectly qualified « success »

### 3. Retrospective study results (1/4)

- From 29th may 2010 to 3rd ocober 2012
- 1240 medical abortions at CH Roubaix
- 825/1240 (67%) biological control, 33% lost for follow up
- 78/825 (9.5%) *hCG*>500U/l, 76/78 *sonographic follow-up*

### 3. Retrospective study results (2/4)

<b>hCG &gt; 1000</b>	<b>actual</b>	<b>frequency</b>
failure	26	74 %
success	9	26 %
	35	100 %

<b>500 &lt; hCG &lt; 1000</b>	<b>actual</b>	<b>frequency</b>
failure	27	62 %
success	16	38 %
	43	100 %

<b>hCG &lt; 500</b>	<b>actual</b>	<b>frequency</b>
failure	4	0.5 %
success	743	99.5 %
	747	100 %

### 3. Retrospective study results (3/4)

- Clinical failure rate: 57/1240 (4.6%)

<i>Taux hCG</i>	<i>Effectifs</i>	<i>Fréquence</i>
<i>&lt; 10</i>	0	0%
<i>11 à 100</i>	0	0%
<i>101 à 300</i>	2	4%
<i>301 à 500</i>	2	4%
<i>501 à 1000</i>	27	47%
<i>&gt; 1000</i>	26	46%
<b><i>Total</i></b>	<b>57</b>	<b>100%</b>

Sensitivity hCG  
93%

**hCG rate distribution among clinical failures (n:57)**



### 3. Retrospective study results (4/4)

<i>Résultats écho</i>	<i>Code</i>	<i>Effectifs</i>	<i>fréquence</i>
<i>vacuity</i>	<i>1</i>	<i>0</i>	<i>0%</i>
<i>rétenction doppler -</i>	<i>2</i>	<i>5</i>	<i>9%</i>
<i>rétenction doppler +</i>	<i>3</i>	<i>48</i>	<i>84%</i>
<i>Gestational sac</i>	<i>4</i>	<i>2</i>	<i>4%</i>
<i>Ongoing pregnancy</i>	<i>5</i>	<i>2</i>	<i>3%</i>
	<i>Total</i>	<i>57</i>	<i>100%</i>

Sensitivity TVuS  
91%

Sonographic results among clinical failures (n:57)

## 4. Prospective study:

- From 02/15/12 to 08/22/12
- 112 women included
- Each patient was called for sonographic and biologic follow up from D 21 to D 25
- So hCG rate was unknown during sonographic examination

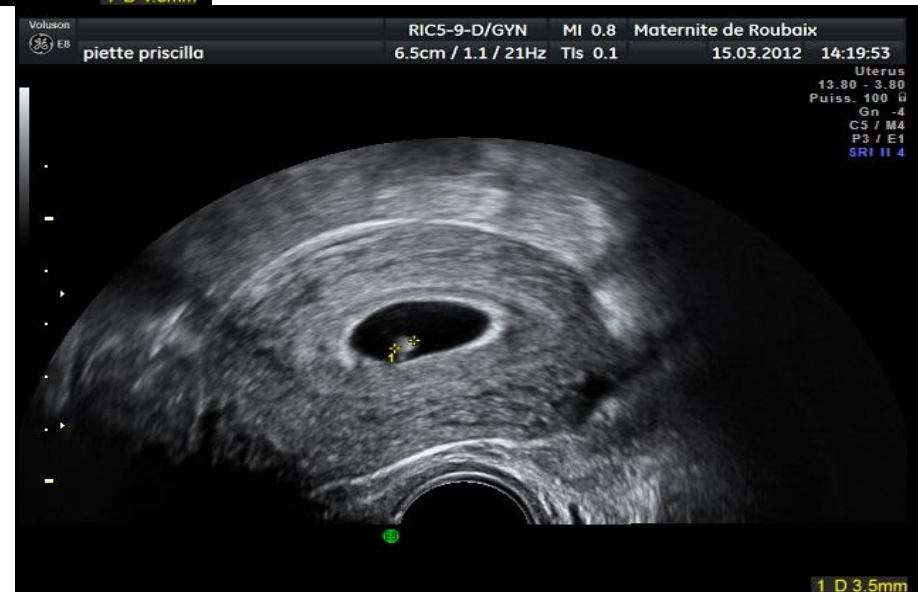
## 4. QUIZZ

- To illustrate our study...
- 5 options are offered numbered from 1 to 5

# Conclusion TVS?

- *1: vacuity*
- *2: partial retention doppler -*
- *3: partial retention doppler +*
- *4: non embryonated gestational sac*
- *5: ongoing pregnancy*

# CONTROL TVuS



	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0			
emilie	20	G2P0	46DA	0			
vanessa	38	G4P2	40DA	1			
katia	35	G1P0	48DA	1			
violette	21	G1P0	41DA	1			
ghanima	25	G1P0	45DA	1			
yveline	26	G6P3	45DA	1			

Voluson



E8

cav fatma

RIC5-9-D/GYN

MI 0.8

Maternite de Roubaix

6.5cm / 1.1 / 21Hz

TIs 0.1

lefebvre 28.08.2012

15:14:46

Uterus

13.80 - 3.80

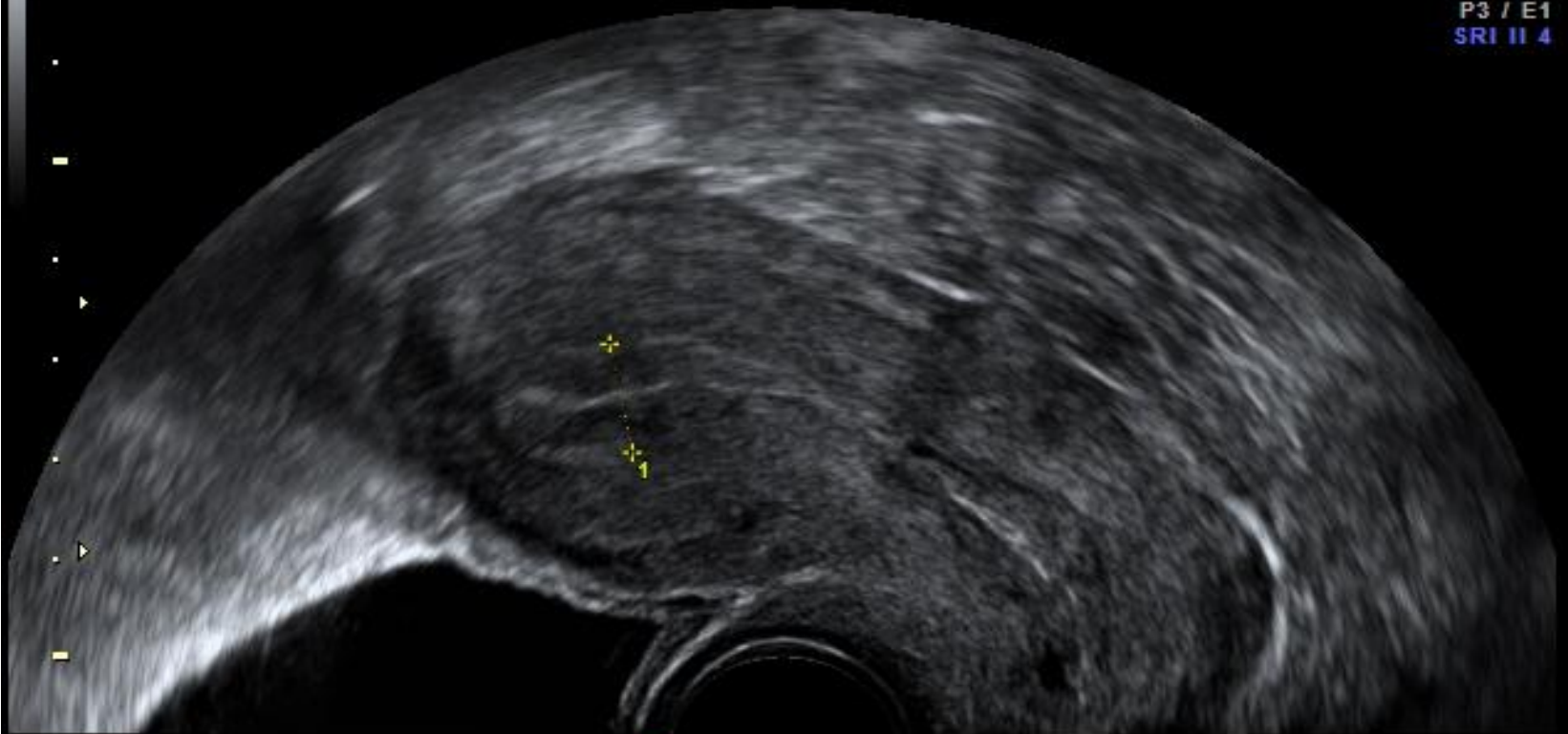
Puiss. 100 0

Gn -4

C5 / M4

P3 / E1

SRI II 4



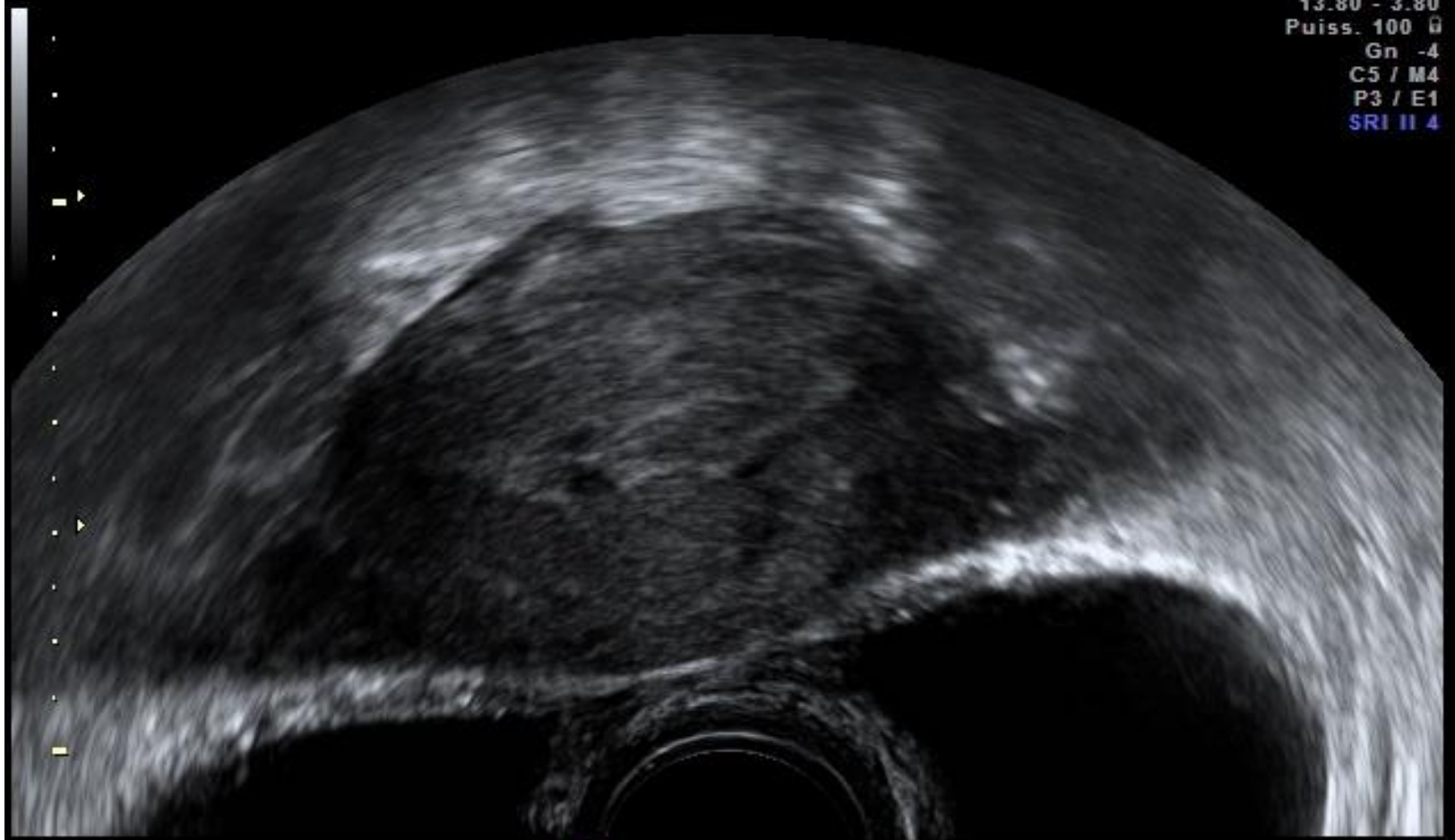
1 D 11.2mm

Voluson  
EB

cav fatma

RIC5-9-D/GYN MI 0.8 Maternite de Roubaix  
6.5cm / 1.3 / 21Hz Tls 0.1 lefebvre 28.08.2012 15:17:09

Uterus  
13.80 - 3.80  
Puiss. 100 0  
Gn -4  
C5 / M4  
P3 / E1  
SRI II 4



EB



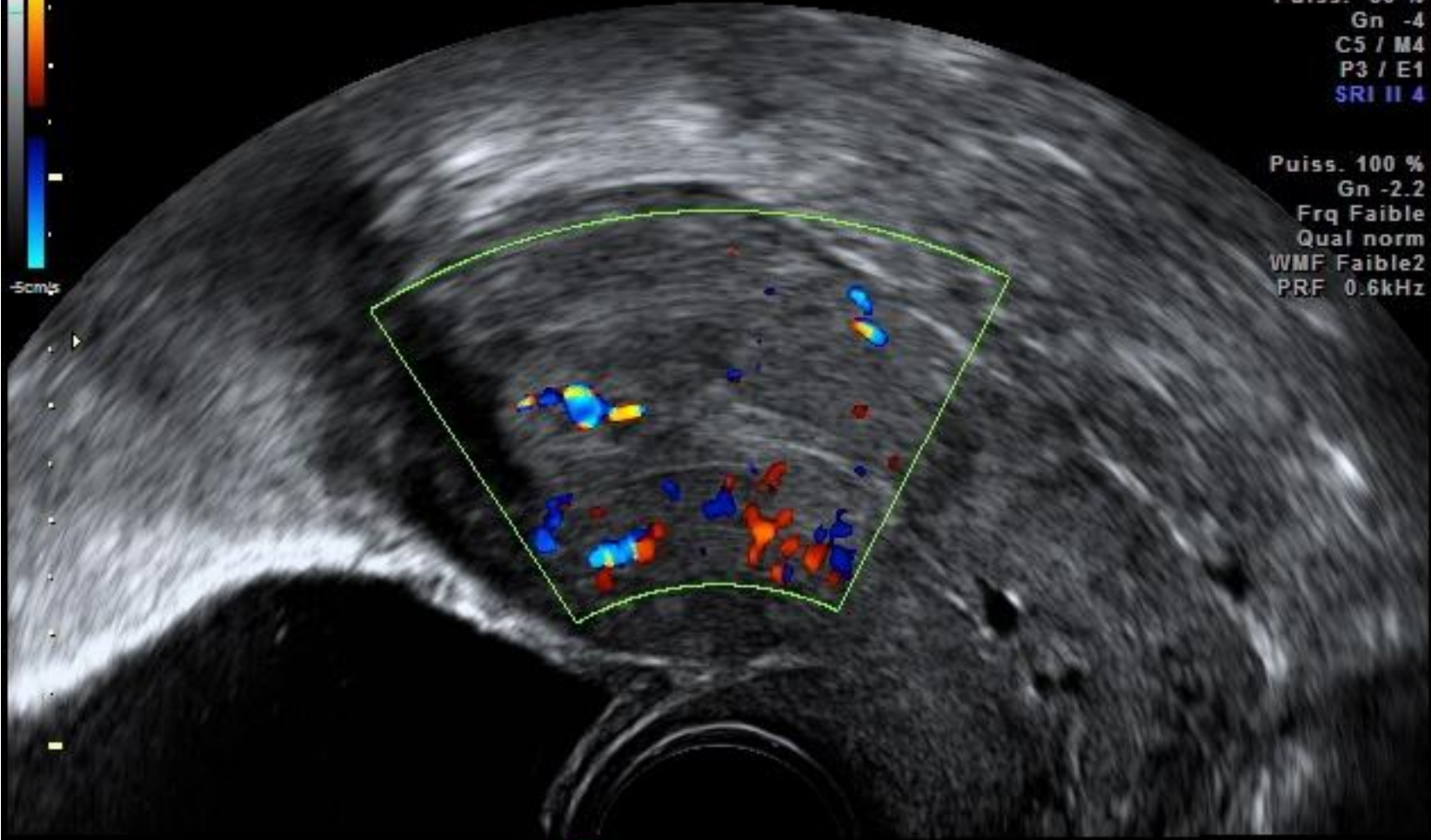
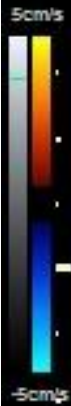
Voluson  
EB

cav fatma

RIC5-9-D/GYN  
6.5cm / 1.3 / 13Hz

MI 0.7  
TIs 0.2

Maternite de Roubaix  
lefebvre 28.08.2012 15:16:04



⊕

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	?		
emilie	20	G2P0	46DA	0			
vanessa	38	G4P2	40DA	1			
katia	35	G1P0	48DA	1			
violette	21	G1P0	41DA	1			
ghanima	25	G1P0	45DA	1			
yveline	26	G6P3	45DA	1			

# Conclusion TVS?

- *1: vacuity*
- *2: partial retention doppler -*
- *3: partial retention doppler +*

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	I		
emilie	20	G2P0	46DA	0			
vanessa	38	G4P2	40DA	I			
katia	35	G1P0	48DA	I			
violette	21	G1P0	41DA	I			
ghanima	25	G1P0	45DA	I			
yveline	26	G6P3	45DA	I			

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	I	156	0
emilie	20	G2P0	46DA	0			
vanessa	38	G4P2	40DA	I			
katia	35	G1P0	48DA	I			
violette	21	G1P0	41DA	I			
ghanima	25	G1P0	45DA	I			
yveline	26	G6P3	45DA	I			



## CAV Fatma

....Routine TVS appears to be an efficient means of accurately diagnosing a complete abortion

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	I	156	0
emilie	20	G2P0	46DA	0			
vanessa	38	G4P2	40DA	I			
katia	35	G1P0	48DA	I			
violette	21	G1P0	41DA	I			
ghanima	25	G1P0	45DA	I			
yveline	26	G6P3	45DA	I			

Voluson



scanna emilie

RIC5-9-D/GYN

MI 0.8

Maternite de Roubaix

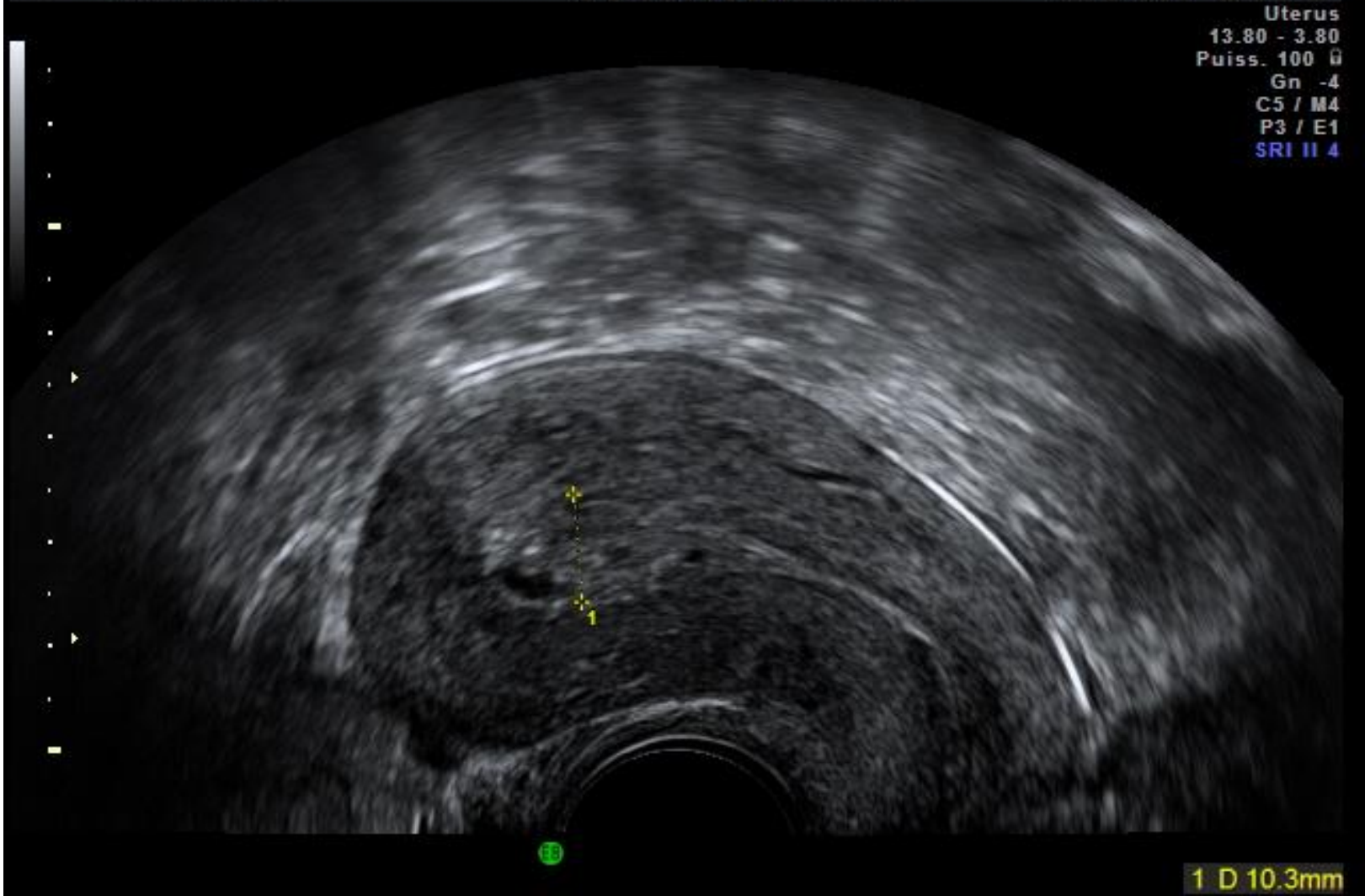
6.5cm / 1.3 / 21Hz

Tls 0.1

28.08.2012

15:28:51

Uterus  
13.80 - 3.80  
Puiss. 100  
Gn -4  
C5 / M4  
P3 / E1  
SRI II 4



1 D 10.3mm



Voluson



scanna emilie

RIC5-9-D/GYN

MI 0.7

Maternite de Roubaix

6.5cm / 1.1 / 17Hz

Tls 0.2

28.08.2012

15:26:59

Uterus

13.80 - 3.80

Puiss. 92 %

Gn -4

C5 / M4

P3 / E1

SRI II 4

Puiss. 100 %

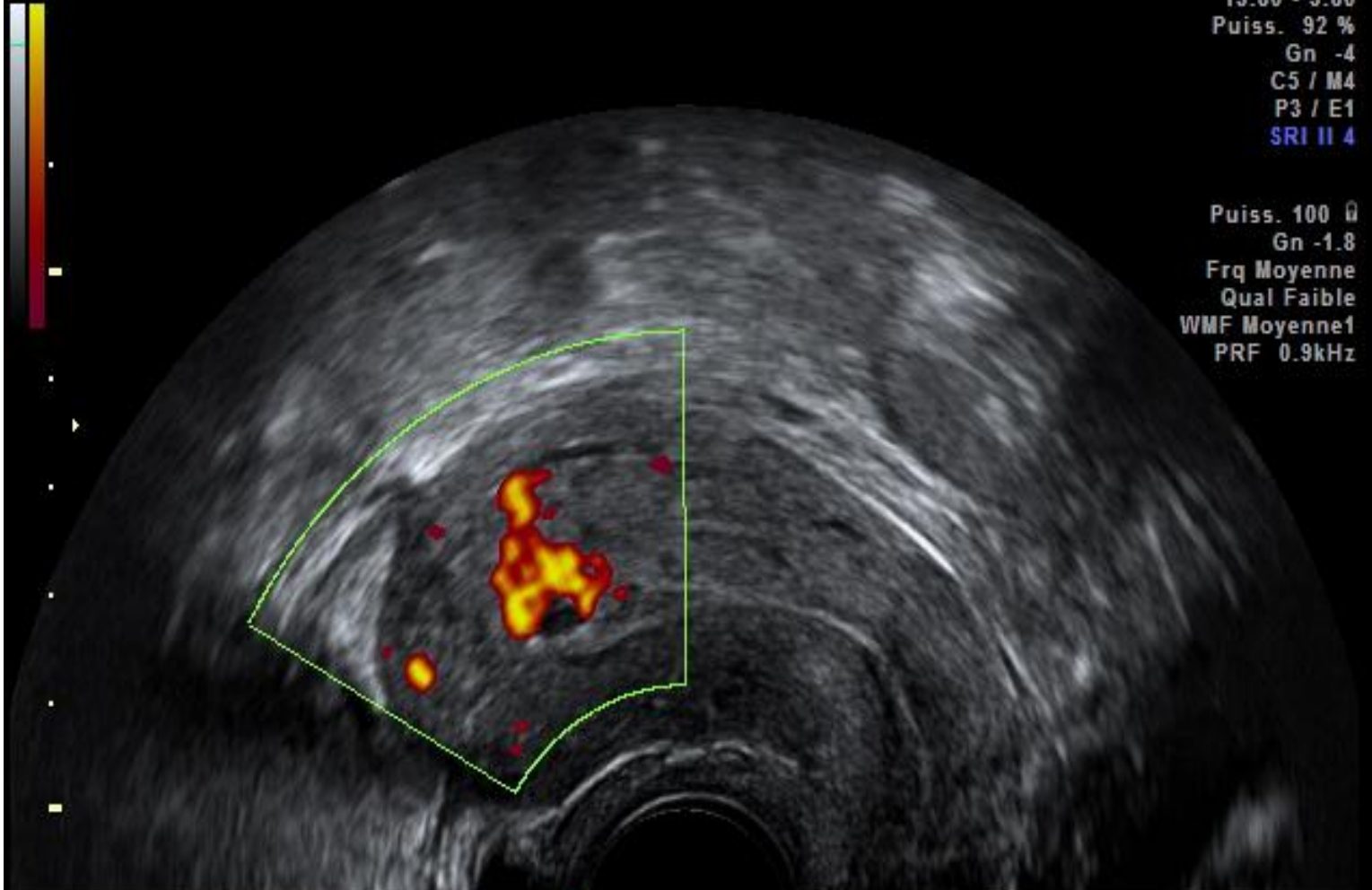
Gn -1.8

Frq Moyenne

Qual Faible

WMF Moyenne1

PRF 0.9kHz



Voluson



E8

scanna emilie

RIC5-9-D/GYN

MI 0.8

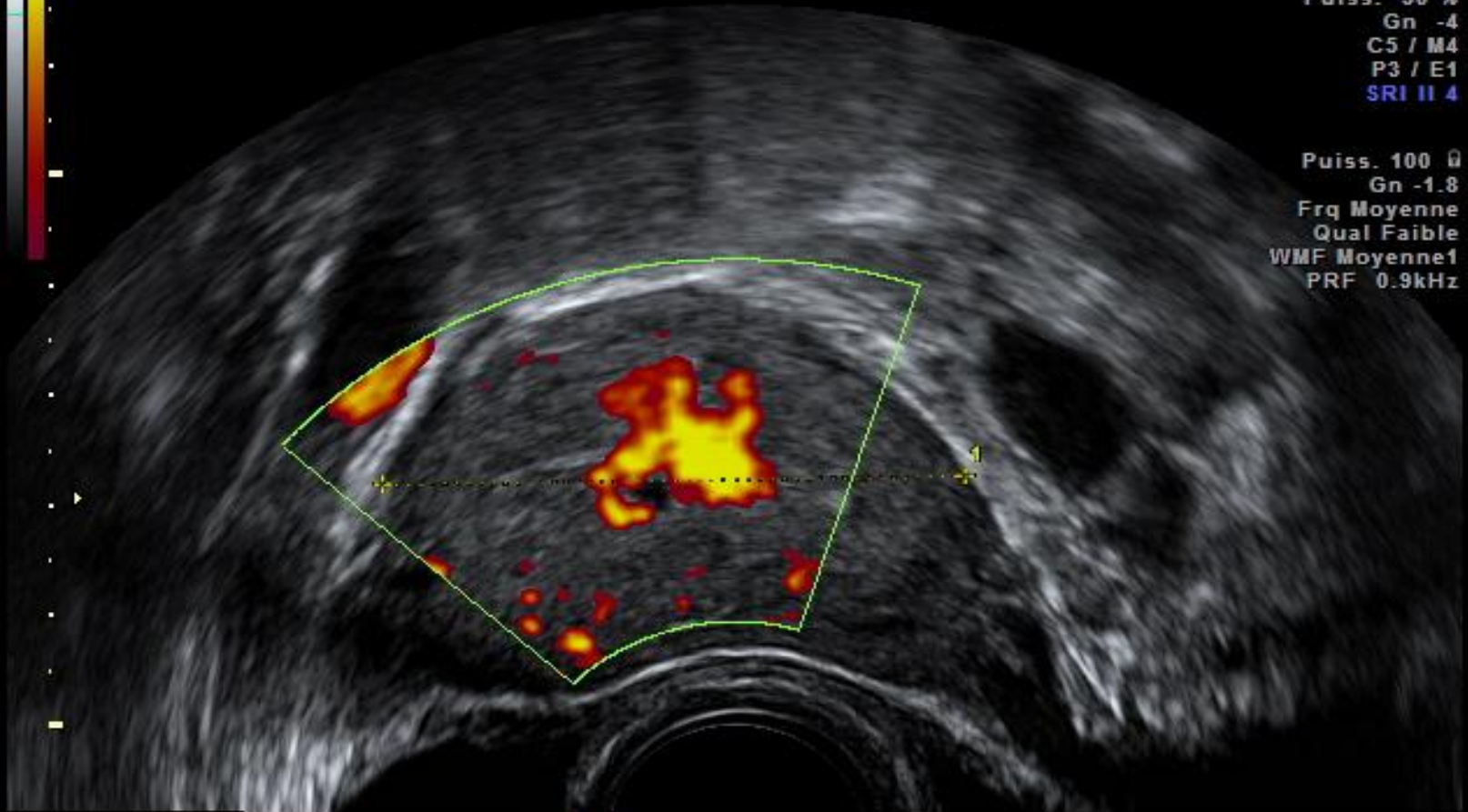
Maternite de Roubaix

6.5cm / 1.3 / 13Hz

Tls 0.2

28.08.2012

15:27:58



Uterus  
13.80 - 3.80  
Puiss. 90 %  
Gn -4  
C5 / M4  
P3 / E1  
SRI II 4

Puiss. 100 0  
Gn -1.8  
Frq Moyenne  
Qual Faible  
WMF Moyenne1  
PRF 0.9kHz



1 D 49.5mm

# Conclusion TVS?

- *1: vacuity*
- *2: partial retention doppler -*
- *3: partial retention doppler +*

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	1	156	0
emilie	20	G2P0	46DA	0	3		
vanessa	38	G4P2	40DA	1			
katia	35	G1P0	48DA	1			
violette	21	G1P0	41DA	1			
ghanima	25	G1P0	45DA	1			
yveline	26	G6P3	45DA	1			

	age	parity	DA	Persistent bleeding	TV S	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	1	156	0
emilie	20	G2P0	46DA	0	3	640	1
vanessa	38	G4P2	40DA	1			
katia	35	G1P0	48DA	1			
violette	21	G1P0	41DA	1			
ghanima	25	G1P0	45DA	1			
yveline	26	G6P3	45DA	1			



## SCA Emilie

Routine TVS after medical abortion appears to be an efficient mean for accurate diagnosis of a retention, doppler positive.

	<b>age</b>	<b>parity</b>	<b>DA</b>	<b>Persistent bleeding</b>	<b>TVS</b>	<b>HCG</b>	<b>Surgical Evacuation</b>
fatma	34	G3P3	38DA	0	1	156	0
emilie	20	G2P0	46DA	0	3	640	1
vanessa	38	G4P2	40DA	1			
katia	35	G1P0	48DA	1			
violette	21	G1P0	41DA	1			
ghanima	25	G1P0	45DA	1			
yveline	26	G6P3	45DA	1			

Voluson



EB

man vanessa

RIC5-9-D/GYN

MI 0.8

Maternite de Roubaix

6.5cm / 1.1 / 21Hz

TIs 0.1

lefebvre 06.06.2012

11:49:09

Uterus  
13.80 - 3.80  
Puiss. 100  $\mu$   
Gn -4  
C5 / M4  
P3 / E1  
SRI II 4



EB

1 D 15.4mm



Voluson



man vanessa

RIC5-9-D/GYN

MI 0.8

Maternite de Roubaix

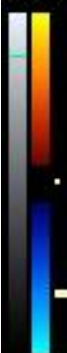
6.5cm / 1.1 / 13Hz

TIs 0.1

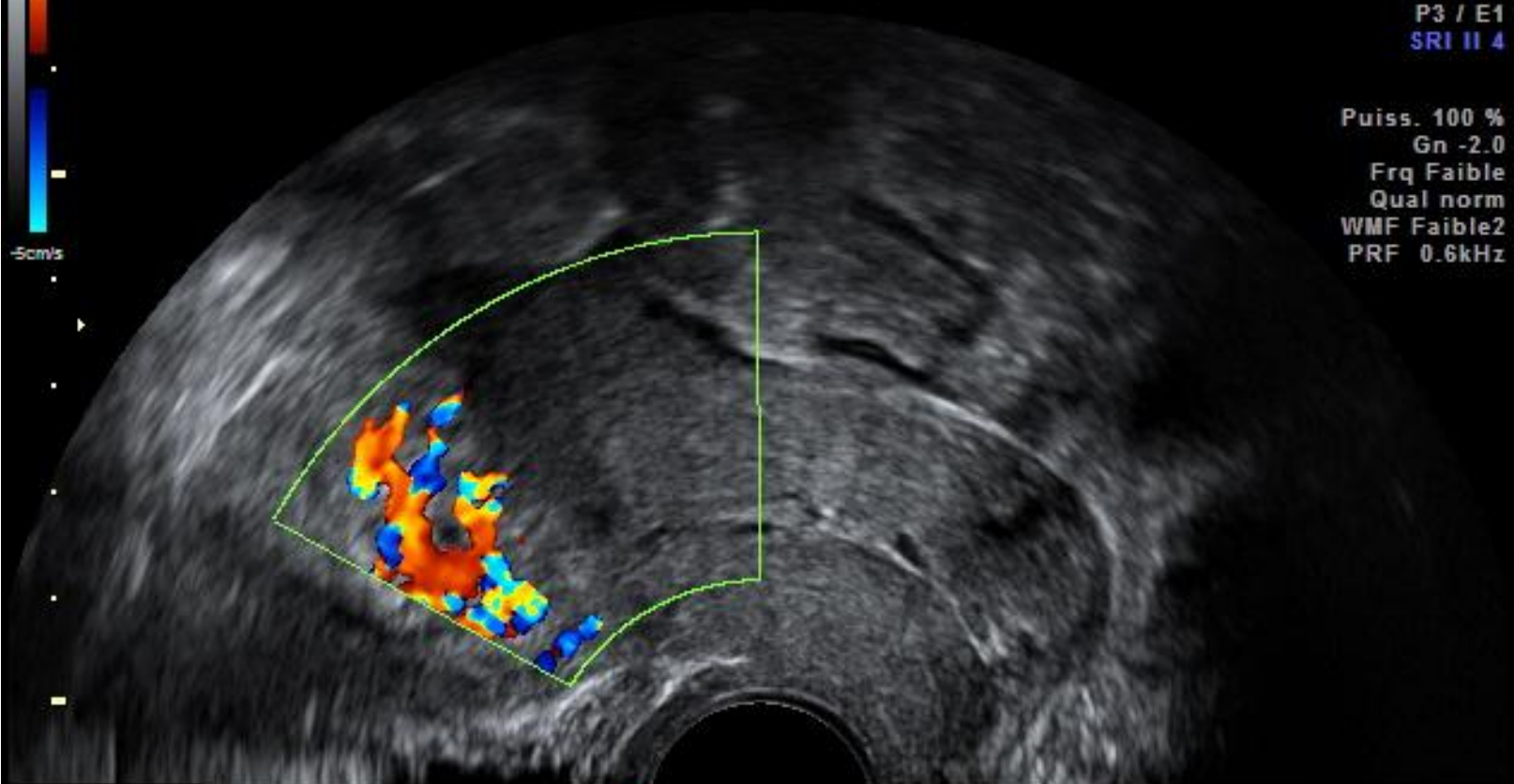
lefebvre 06.06.2012

11:49:51

5cm/s



-5cm/s



Uterus

13.80 - 3.80

Puiss. 95 %

Gn -4

C5 / M4

P3 / E1

SRI II 4

Puiss. 100 %

Gn -2.0

Frq Faible

Qual norm

WMF Faible2

PRF 0.6kHz



Voluson



man vanessa

RIC5-9-D/GYN

MI 0.8

Maternite de Roubaix

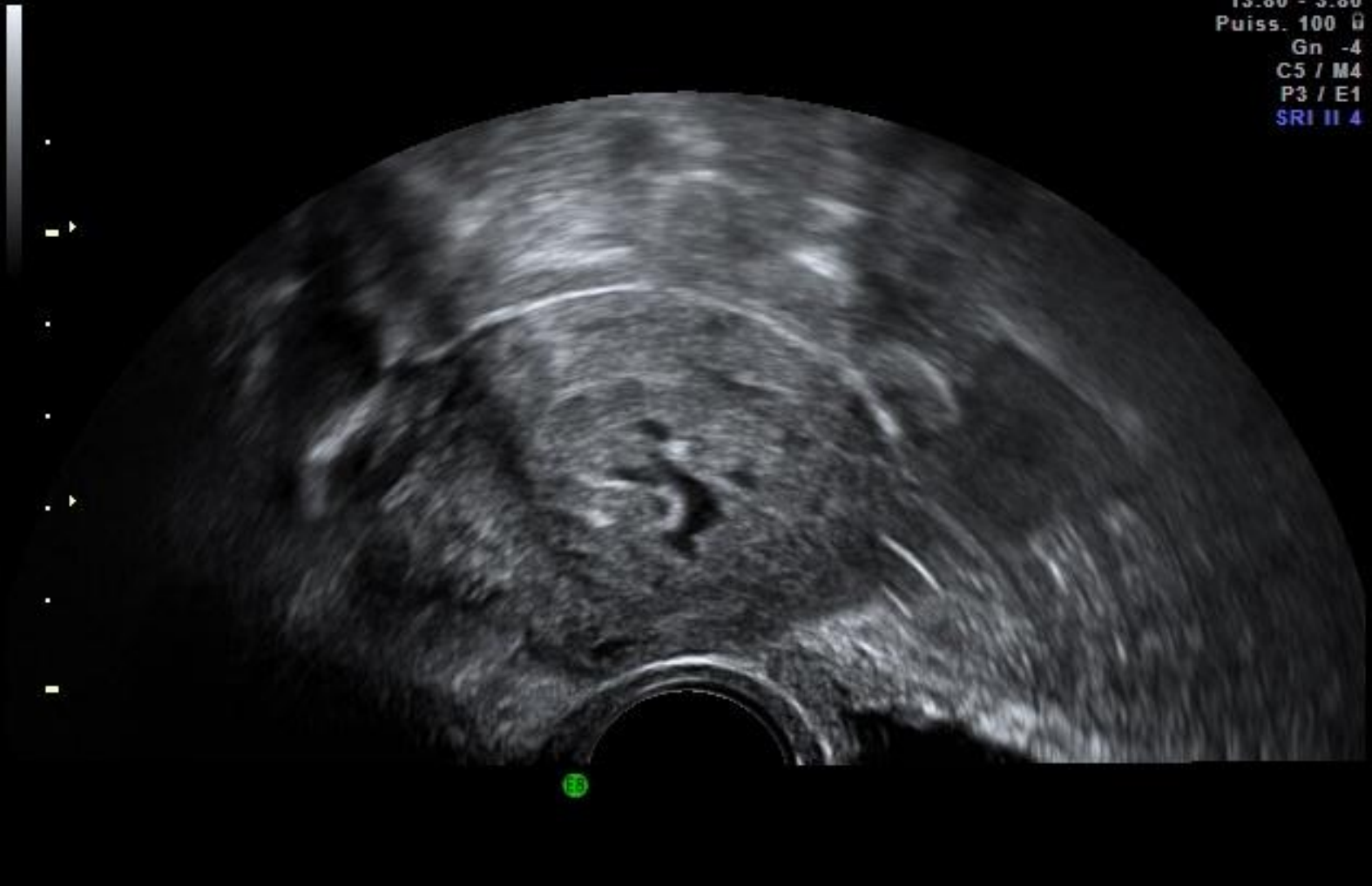
6.5cm / 1.1 / 21Hz

TIs 0.1

lefebvre 06.06.2012

11:51:36

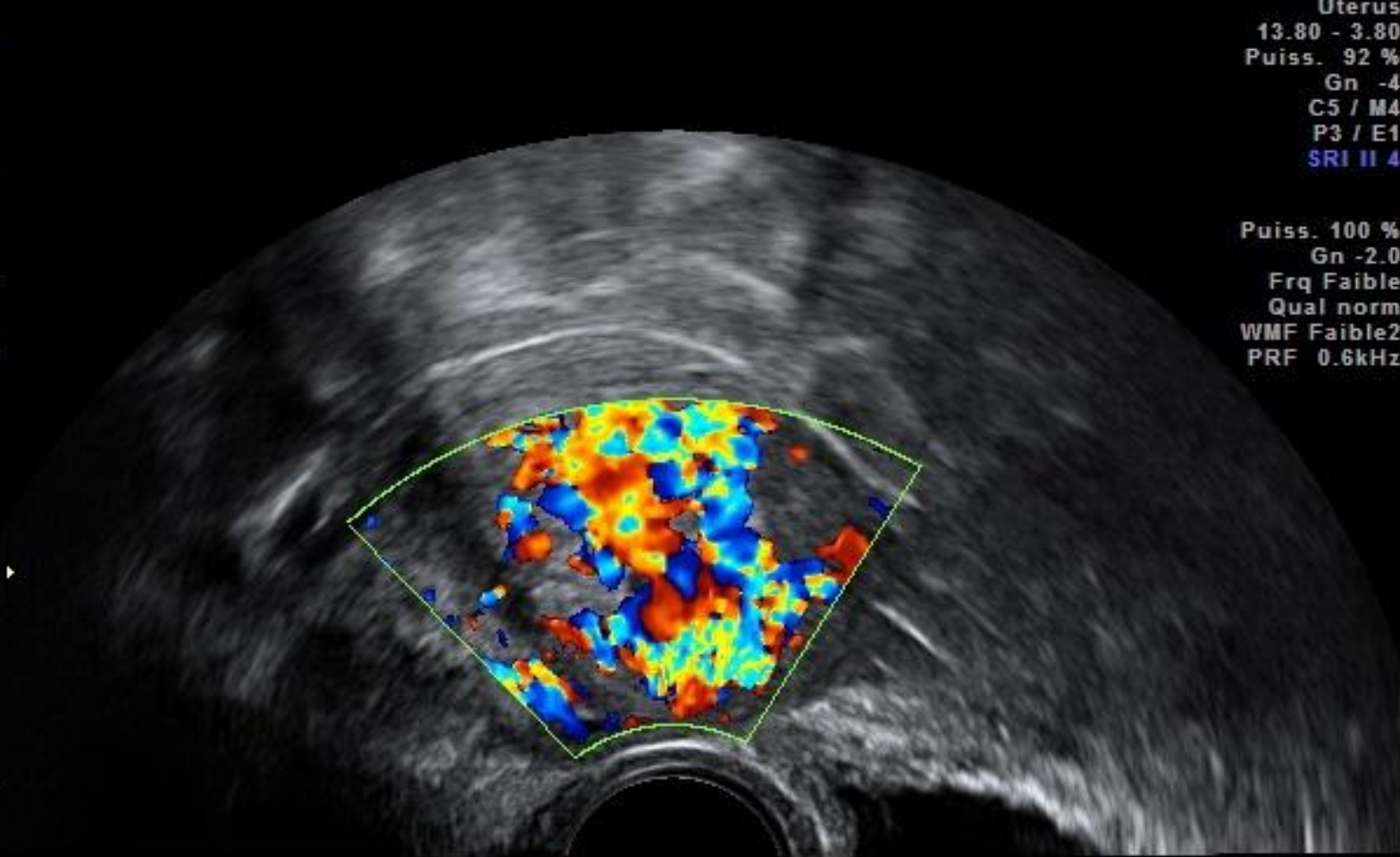
Uterus  
13.80 - 3.80  
Puiss. 100 µ  
Gn -4  
C5 / M4  
P3 / E1  
SRI II 4



Voluson



RIC5-9-D/GYN MI 0.8 Maternite de Roubaix  
man vanessa 6.5cm / 1.1 / 13Hz TIs 0.2 lefebvre 06.06.2012 11:51:57



Uterus  
13.80 - 3.80  
Puiss. 92 %  
Gn -4  
C5 / M4  
P3 / E1  
SRI II 4  
  
Puiss. 100 %  
Gn -2.0  
Frq Faible  
Qual norm  
WMF Faible2  
PRF 0.6kHz

ES

# Conclusion TVS?

- *1: vacuity*
- *2: partial retention doppler -*
- *3: partial retention doppler +*
- *4: non embryonated gestational sac*

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	1	156	0
emilie	20	G2P0	46DA	0	3	640	1
<b>vanessa</b>	<b>38</b>	<b>G4P2</b>	<b>40DA</b>	<b>1</b>	<b>?</b>		
katia	35	G1P0	48DA	1			
violette	21	G1P0	41DA	1			
ghanima	25	G1P0	45DA	1			
yveline	26	G6P3	45DA	1			

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38D A	0	1	156	0
emilie	20	G2P0	46D A	0	3	640	1
vanessa	38	G4P2	40D A	1	3		
katia	35	G1P0	48D A	1			
violette	21	G1P0	41D A	1			
ghanima	25	G1P0	45D A	1			
yveline	26	G6P3	45D A	1			

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	1	156	0
emilie	20	G2P0	46DA	0	3	640	1
vanessa	38	G4P2	40DA	1	3	1739	1
katia	35	G1P0	48DA	1			
violette	21	G1P0	41DA	1			
ghanima	25	G1P0	45DA	1			
yveline	26	G6P3	45DA	1			



# MAN Vanessa

Wow...Same conclusions...😊



	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	1	156	0
emilie	20	G2P0	46DA	0	3	640	1
vanessa	38	G4P2	40DA	1	3	1739	1
<b>katia</b>	<b>35</b>	<b>G1P0</b>	<b>48DA</b>	<b>1</b>			
violette	21	G1P0	41DA	1			
ghanima	25	G1P0	45DA	1			
yveline	26	G6P3	45DA	1			

Voluson



E8

tud katia

RIC5-9-D/GYN

MI 0.8

Maternite de Roubaix

6.5cm / 1.1 / 21Hz

Tls 0.1

lefeb vre 29.03.2012

15:43:38

Uterus  
13.80 - 3.80  
Puiss. 100 0  
Gn -4  
C5 / M4  
P3 / E1  
SRI II 4



1 D 9.6mm

Voluson



tud katia

RIC5-9-D/GYN

MI 0.8

Maternite de Roubaix

6.5cm / 1.1 / 13Hz

TIs 0.1

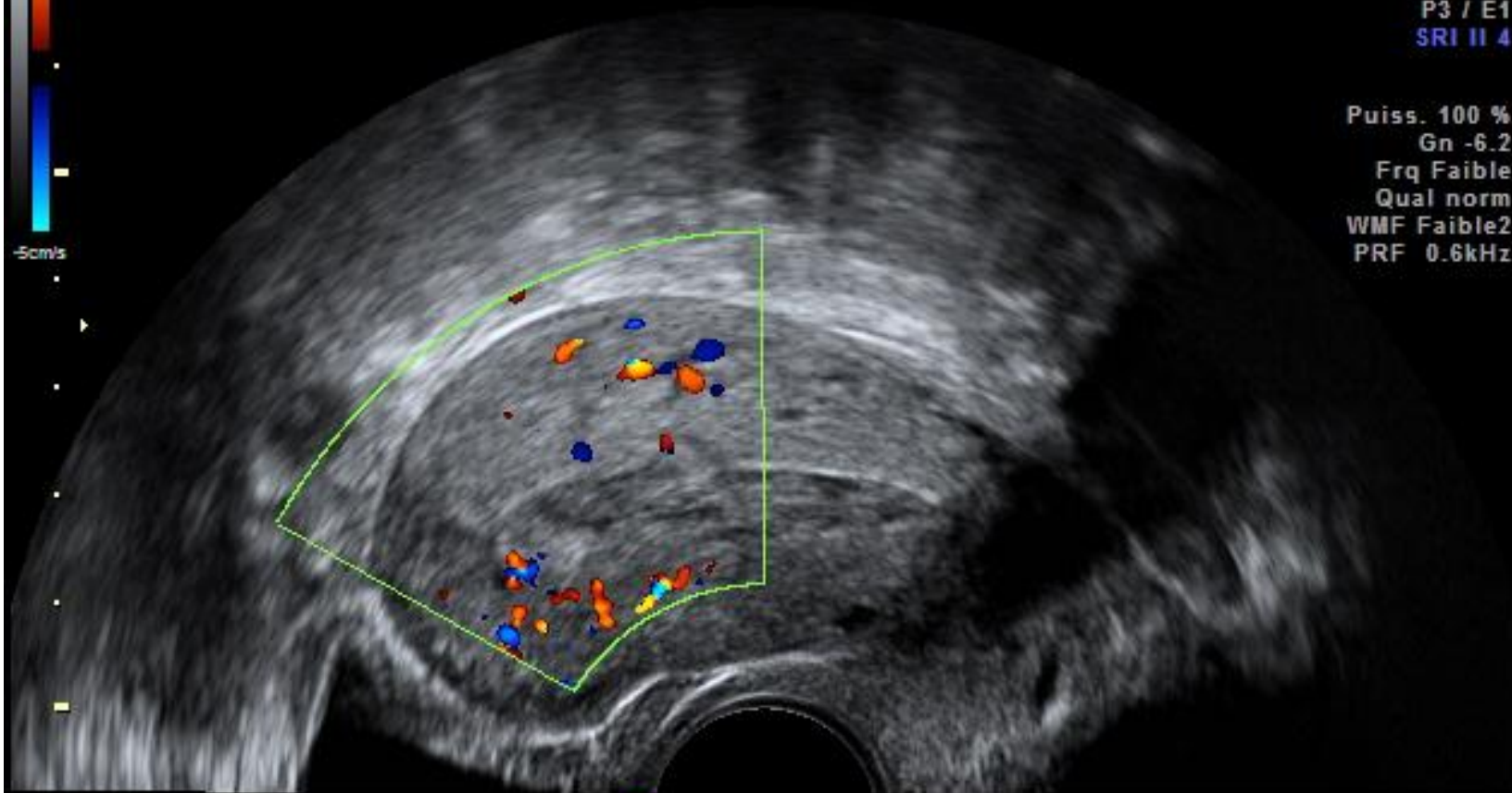
lefeb vre 29.03.2012

15:45:16

5cm/s



-5cm/s



Uterus

13.80 - 3.80

Puiss. 95 %

Gn -4

C5 / M4

P3 / E1

SRI II 4

Puiss. 100 %

Gn -6.2

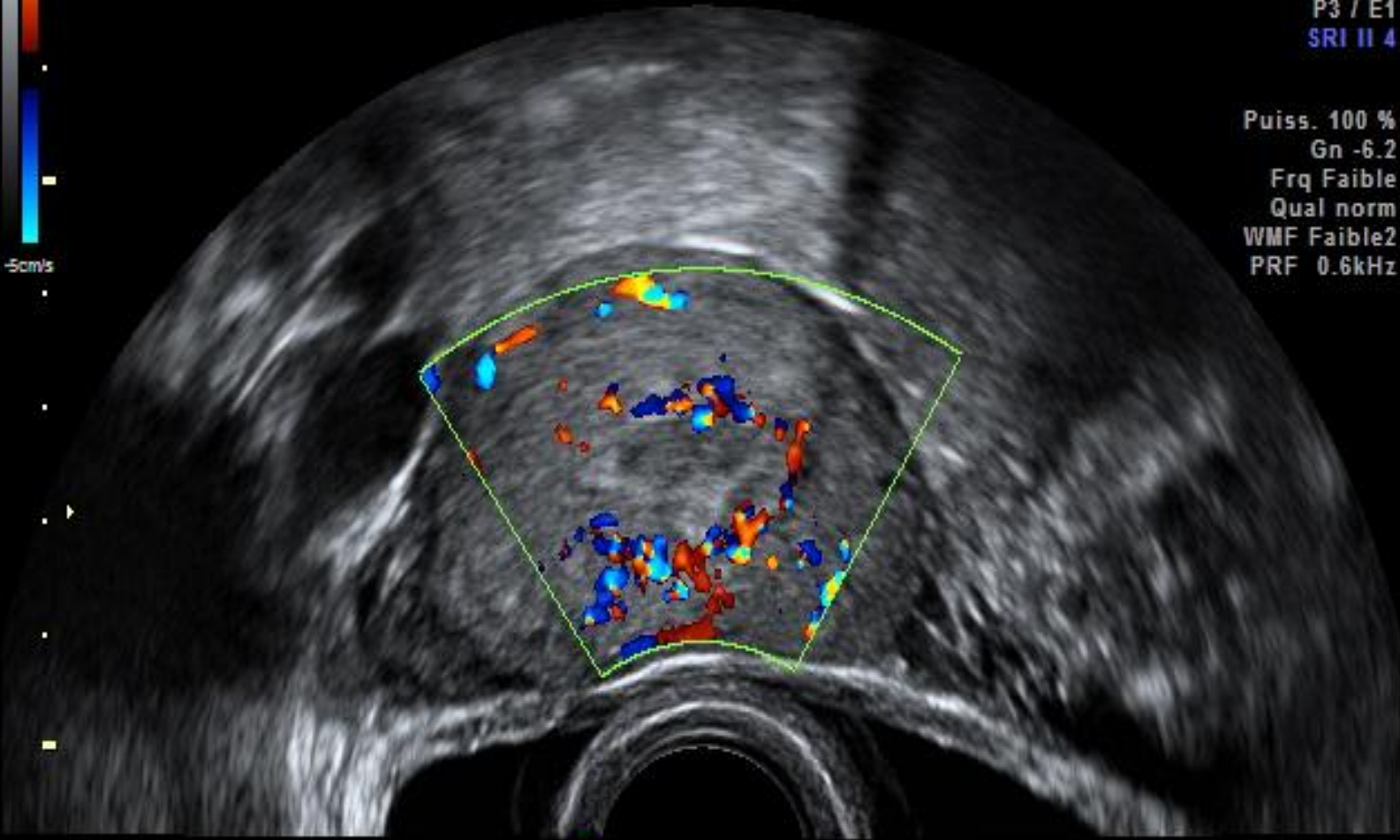
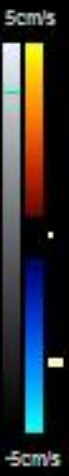
Frq Faible

Qual norm

WMF Faible2

PRF 0.6kHz





Uterus  
13.80 - 3.80  
Puiss. 89 %  
Gn -4  
C5 / M4  
P3 / E1  
**SRI II 4**  
  
Puiss. 100 %  
Gn -6.2  
Frq Faible  
Qual norm  
WMF Faible2  
PRF 0.6kHz

Voluson



EB

tud katia

RIC5-9-D/GYN

MI 0.7

Maternite de Roubaix

6.5cm / 1.1 / 17Hz

TIs 0.2

lefeb vre 29.03.2012

15:48:36



Uterus

13.80 - 3.80

Puiss. 92 %

Gn -4

C5 / M4

P3 / E1

SRI II 4

Puiss. 100 %

Gn -1.8

Frq Moyenne

Qual Faible

WMF Moyenne1

PRF 0.9kHz

EB

# Conclusion TVS?

- *1: vacuity*
- *2: partial retention doppler -*
- *3: partial retention doppler +*

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	1	156	0
emilie	20	G2P0	46DA	0	3	640	1
vanessa	38	G4P2	40DA	1	3	1739	1
katia	35	G1P0	48DA	1	3		
violette	21	G1P0	41DA	1			
ghanima	25	G1P0	45DA	1			
yveline	26	G6P3	45DA	1			

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	1	156	0
emilie	20	G2P0	46DA	0	3	640	1
vanessa	38	G4P2	40DA	1	3	1739	1
katia	35	G1P0	48DA	1	3	102	0
violette	21	G1P0	41DA	1			
ghanima	25	G1P0	45DA	1			
yveline	26	G6P3	45DA	1			





# TUD Katia

Can TVS alone dictate clinical intervention?

.....Taking into account hCG rate , decision was made not to perform any suction curetage.

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	1	156	0
emilie	20	G2P0	46DA	0	3	640	1
vanessa	38	G4P2	40DA	1	3	1739	1
katia	35	G1P0	48DA	1	3	102	0
violette	21	G1P0	41DA	1			
ghanima	25	G1P0	45DA	1			
yveline	26	G6P3	45DA	1			

Voluson



E8

fre violette

RIC5-9-D/GYN

MI 0.8

Maternite de Roubaix

8.9cm / 1.1 / 20Hz

TIs 0.1

lefebvre 27.06.2012

12:04:04

Uterus Pfd

FFC

Puiss. 100 0

Gn 4

C7 / M8

P2 / E1

SRI II 3



1 D 22.5mm

Voluson



fre violette

RIC5-9-D/GYN

MI 0.6

Maternite de Roubaix

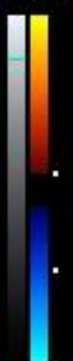
8.9cm / 1.2 / 18Hz

Tls 0.1

lefebvre 27.06.2012

12:09:18

10cm/s



-10cm/s

-10cm/s

-10cm/s

-10cm/s

-10cm/s

-10cm/s

-10cm/s

-10cm/s

-10cm/s

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-10cm/s

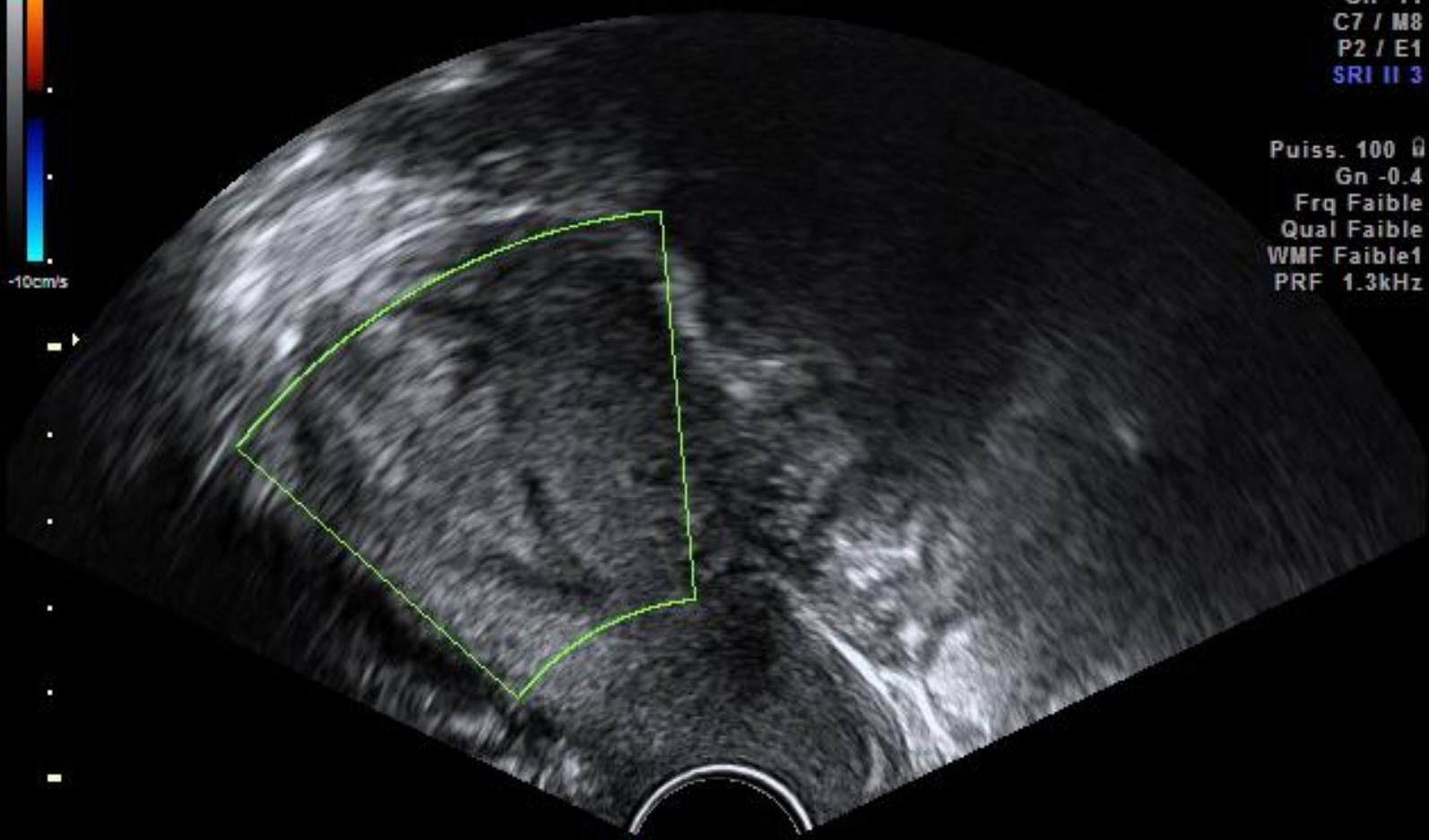
-10cm/s

-10cm/s

-10cm/s

Uterus Pfd  
8.10 - 2.10  
Puiss. 97 %  
Gn 11  
C7 / M8  
P2 / E1  
SRI II 3

Puiss. 100 %  
Gn -0.4  
Frq Faible  
Qual Faible  
WMF Faible1  
PRF 1.3kHz



36

Voluson



fre violette

RIC5-9-D/GYN

MI 0.6

Maternite de Roubaix

8.9cm / 1.2 / 20Hz

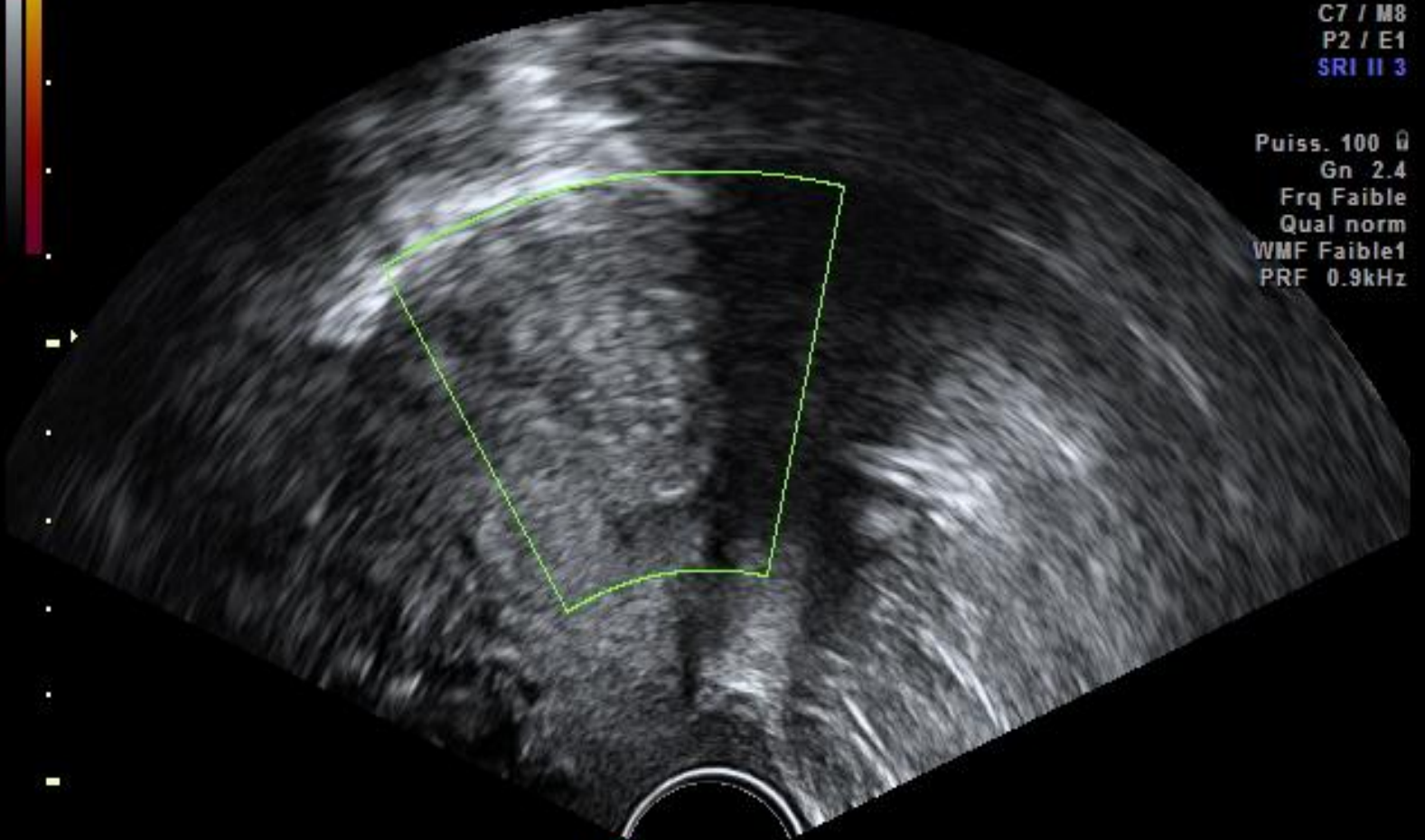
TIs 0.1

lefebvre 27.06.2012

12:09:55

Uterus Pfd  
8.10 - 2.10  
Puiss. 97 %  
Gn 11  
C7 / M8  
P2 / E1  
SRI II 3

Puiss. 100 %  
Gn 2.4  
Frq Faible  
Qual norm  
WMF Faible1  
PRF 0.9kHz



65

# Conclusion TVS?

- *1: vacuity*
- *2: partial retention doppler -*
- *3: partial retention doppler +*

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	1	156	0
emilie	20	G2P0	46DA	0	3	640	1
vanessa	38	G4P2	40DA	1	3	1739	1
katia	35	G1P0	48DA	1	3	102	0
violette	21	G1P0	41DA	1	2		
ghanima	25	G1P0	45DA	1			
yveline	26	G6P3	45DA	1			

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	1	156	0
emilie	20	G2P0	46DA	0	3	640	1
vanessa	38	G4P2	40DA	1	3	1739	1
katia	35	G1P0	48DA	1	3	102	0
violette	21	G1P0	41DA	1	2	1701	1
ghanima	25	G1P0	45DA	1			
yveline	26	G6P3	45DA	1			





# **FRE Violette**

False negative on TVS...

Difficulties due to intermediate position of uterus

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	1	156	0
emilie	20	G2P0	46DA	0	3	640	1
vanessa	38	G4P2	40DA	1	3	1739	1
katia	35	G1P0	48DA	1	3	102	0
violette	21	G1P0	41DA	1	2	1701	1
ghanima	25	G1P0	45DA	1			
yveline	26	G6P3	45DA	1			

Voluson



E8

aït ghanima

RIC5-9-D/GYN

MI 0.8

Maternite de Roubaix

6.5cm / 1.1 / 14Hz

TIs 0.1

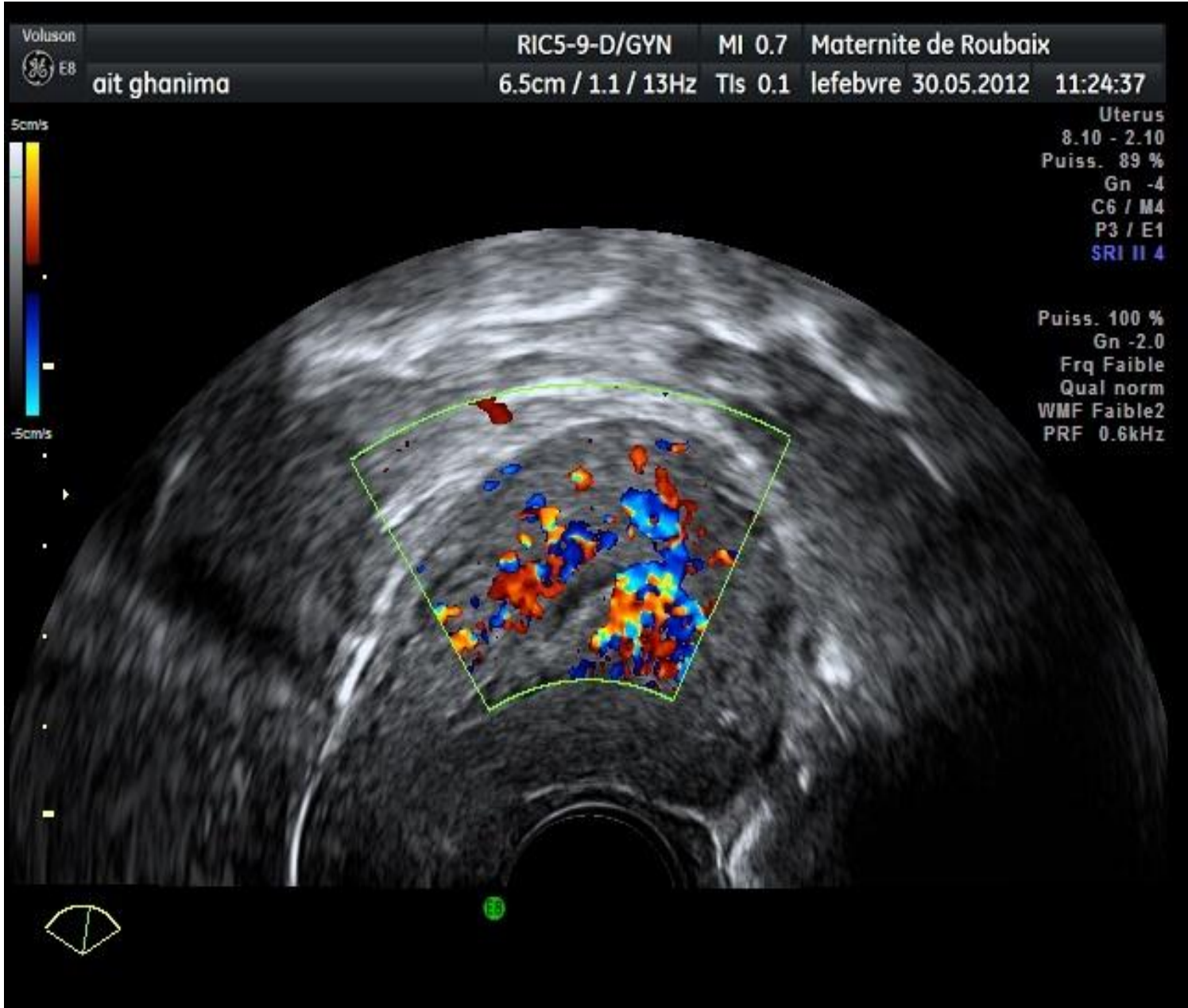
lefebvre 30.05.2012

11:23:46

Uterus  
8.10 - 2.10  
Puiss. 100 µ  
Gn -4  
C6 / M4  
P3 / E1  
SRI II 4



1 D 14.5mm



Voluson



ait ghanima

RIC5-9-D/GYN

MI 0.7

Maternite de Roubaix

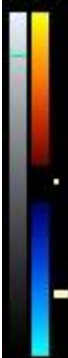
6.5cm / 1.1 / 13Hz

TIs 0.1

lefebvre 30.05.2012

11:25:25

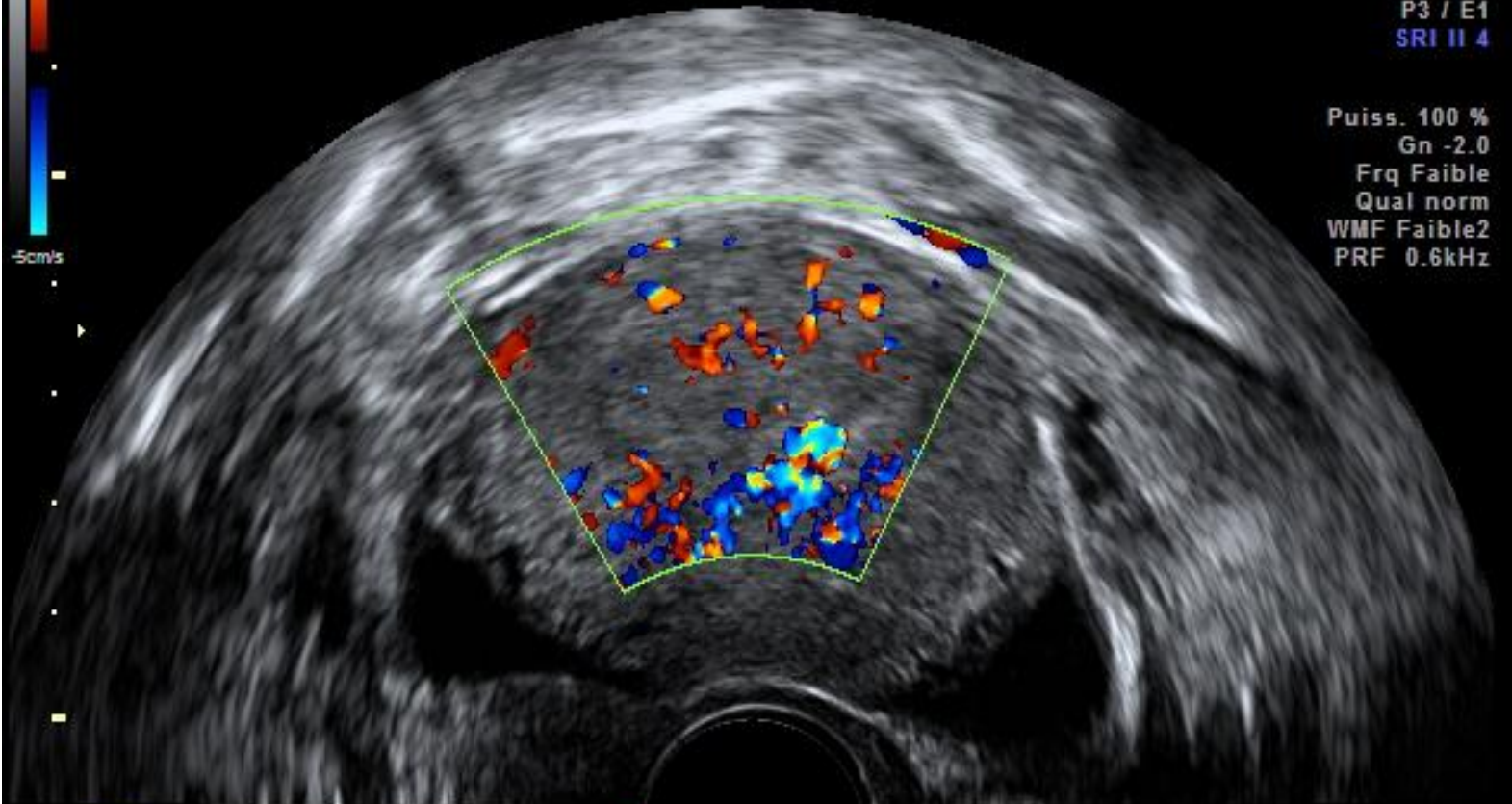
5cm/s



-5cm/s

Uterus  
8.10 - 2.10  
Puiss. 89 %  
Gn -4  
C6 / M4  
P3 / E1  
SRI II 4

Puiss. 100 %  
Gn -2.0  
Frq Faible  
Qual norm  
WMF Faible2  
PRF 0.6kHz



Voluson



ait ghanima

RIC5-9-D/GYN

MI 0.7

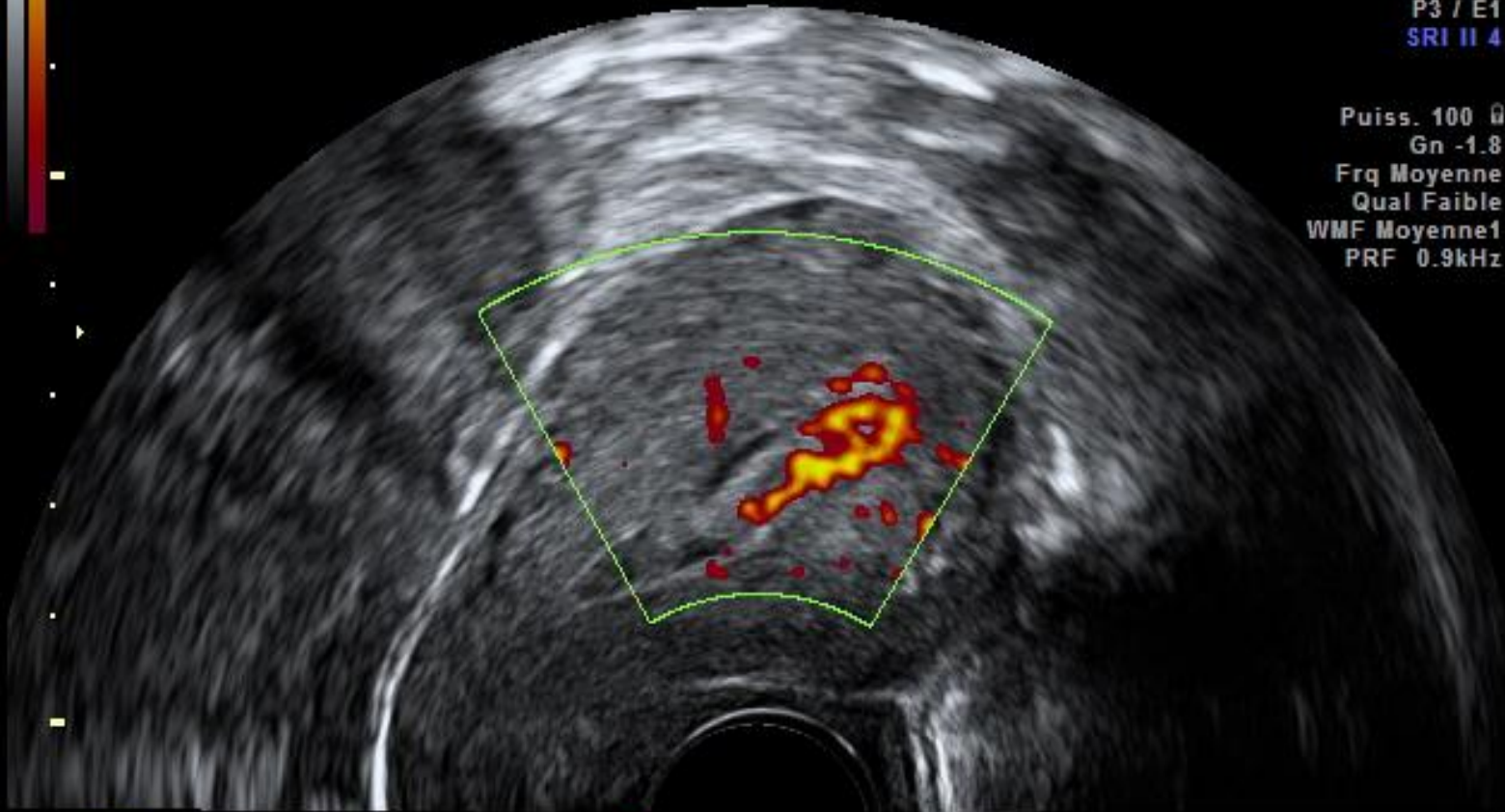
Maternite de Roubaix

6.5cm / 1.1 / 17Hz

TIs 0.2

lefebvre 30.05.2012

11:25:57



Uterus  
8.10 - 2.10  
Puiss. 92 %  
Gn -4  
C6 / M4  
P3 / E1  
SRI II 4

Puiss. 100 Ω  
Gn -1.8  
Frq Moyenne  
Qual Faible  
WMF Moyenne1  
PRF 0.9kHz



# Conclusion TVS?

- *1: vacuity*
- *2: partial retention doppler -*
- *3: partial retention doppler +*
- *4: non embryonated gestational sac*

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	1	156	0
emilie	20	G2P0	46DA	0	3	640	1
vanessa	38	G4P2	40DA	1	3	1739	1
katia	35	G1P0	48DA	1	3	102	0
violette	21	G1P0	41DA	1	2	1701	1
ghanima	25	G1P0	45DA	1	3 or 4		
yveline	26	G6P3	45DA	1			



	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	1	156	0
emilie	20	G2P0	46DA	0	3	640	1
vanessa	38	G4P2	40DA	1	3	1739	1
katia	35	G1P0	48DA	1	3	102	0
violette	21	G1P0	41DA	1	2	1701	1
ghanima	25	G1P0	45DA	1	3 or 4	158	1
yveline	26	G6P3	45DA	1			



# AIT Ghanima

False negative on biological follow up...

.....????

the only one in 6 months...

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	1	156	0
emilie	20	G2P0	46DA	0	3	640	1
vanessa	38	G4P2	40DA	1	3	1739	1
katia	35	G1P0	48DA	1	3	102	0
violette	21	G1P0	41DA	1	2	1701	1
ghanima	25	G1P0	45DA	1	3 or 4	158	1
yveline	26	G6P3	45DA	1			

Voluson



EB  
jas yveline

RIC5-9-D/GYN

MI 0.8

Maternite de Roubaix

5.4cm / 1.1 / 23Hz

TIs 0.1

lefebvre 29.06.2012

10:25:51

Uterus  
13.80 - 3.80  
Puiss. 100 0  
Gn -6  
C5 / M4  
P3 / E1  
SRI II 4



33

1 D 16.1mm

Voluson  
EB

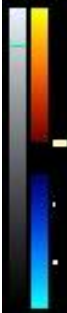
jas yveline

RIC5-9-D/GYN  
5.4cm / 1.1 / 13Hz

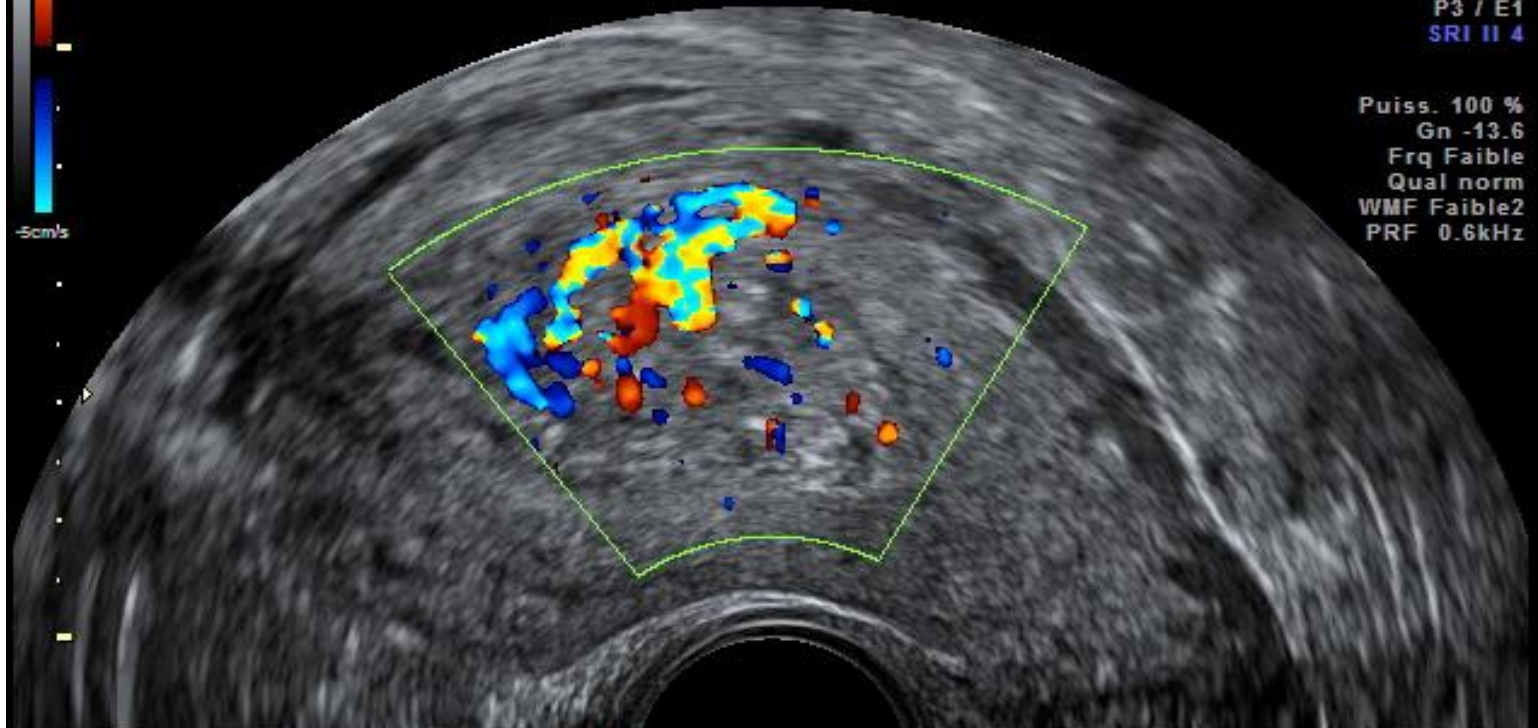
MI 0.7  
TIs 0.2

Maternite de Roubaix  
lefebvre 29.06.2012 10:26:37

5cm/s



-5cm/s



Uterus  
13.80 - 3.80  
Puiss. 89 %  
Gn -6  
C5 / M4  
P3 / E1  
SRI II 4

Puiss. 100 %  
Gn -13.6  
Frq Faible  
Qual norm  
WMF Faible2  
PRF 0.6kHz

EB

Voluson



jas yveline

RIC5-9-D/GYN

MI 0.8

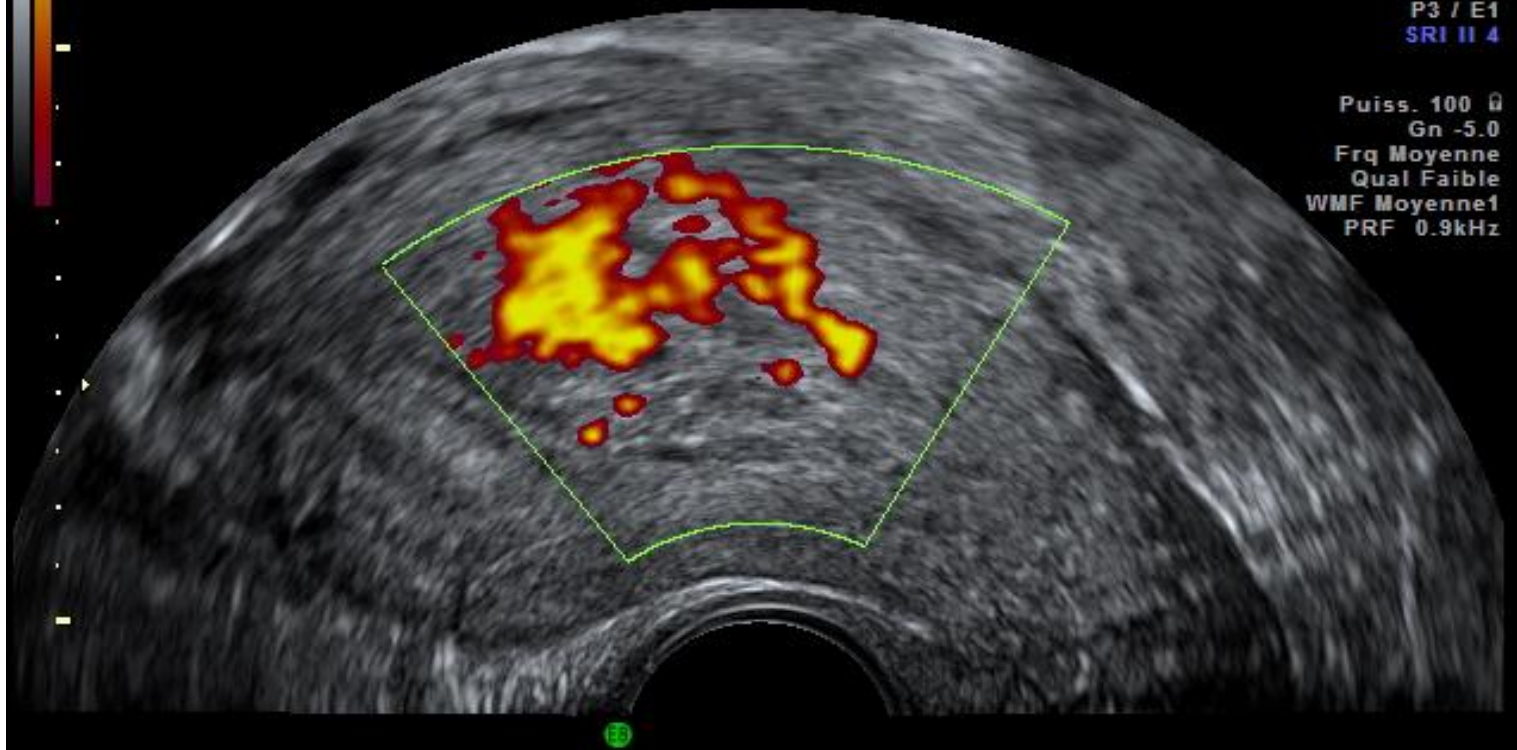
Maternite de Roubaix

5.4cm / 1.1 / 13Hz

TIs 0.2

lefebvre 29.06.2012

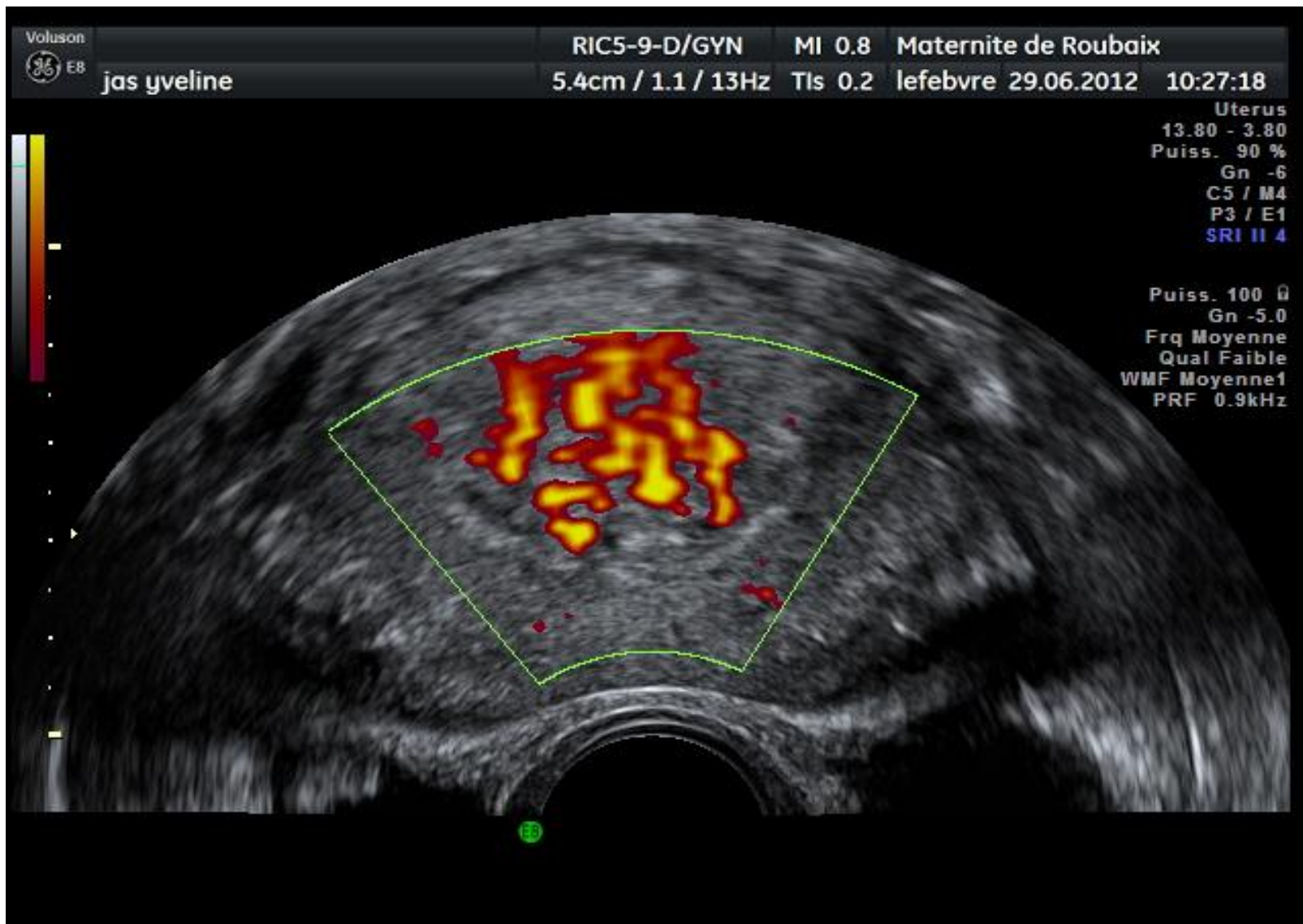
10:27:10



Uterus  
13.80 - 3.80  
Puiss. 90 %  
Gn -6  
C5 / M4  
P3 / E1  
SRI II 4

Puiss. 100 %  
Gn -5.0  
Frq Moyenne  
Qual Faible  
WMF Moyenne1  
PRF 0.9kHz

33



# Conclusion TVS?

- *1: vacuity*
- *2: partial retention doppler -*
- *3: partial retention doppler +*
- *4: non embryonated gestational sac*



	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
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katia	35	G1P0	48DA	1	3	102	0
violette	21	G1P0	41DA	1	2	1701	1
ghanima	25	G1P0	45DA	1	3 or 4	158	1
yveline	26	G6P3	45DA	1	3		

	age	parity	DA	Persistent bleeding	TVS	HCG	Surgical Evacuation
fatma	34	G3P3	38DA	0	1	156	0
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katia	35	G1P0	48DA	1	3	102	0
violette	21	G1P0	41DA	1	2	1701	1
ghanima	25	G1P0	45DA	1	3 or 4	158	1
yveline	26	G6P3	45DA	1	3	461	1



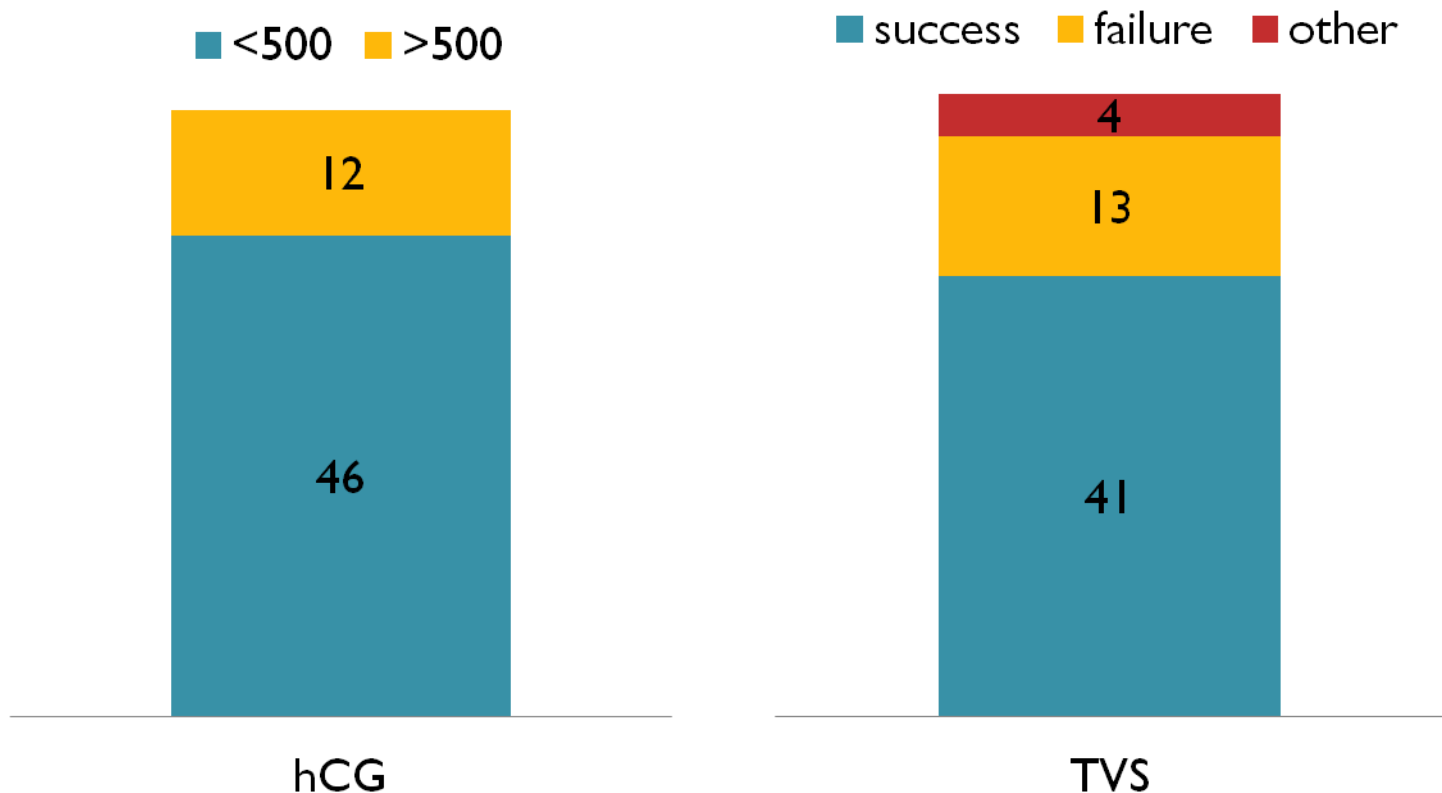
# JAS Yveline

hCG= 46l controlled 34 days after medical abortion.... So threshold 500 ui/ml until the 25th day...

- 
- ... and same thing 82 times..

## 4. Prospective study results (1/6)

- 112 women included
- 82/112 (73.2%) follow-ups, 27.8% of absenteeism
- 58/82 (70.7%) from D21 to D25.



## 4. Prospective study results (2/6)

<i>Taux hcg</i>	<i>Effectifs</i>	<i>Fréquence</i>
<i>&lt; 10</i>	0	0%
<i>11 à 100</i>	0	0%
<i>101 à 300</i>	1	9%
<i>301 à 500</i>	0	0%
<i>501 à 1000</i>	6	54.5%
<i>&gt; 1000</i>	4	36.4%
<i>Total</i>	<i>11</i>	<i>100%</i>

Sensitivity hCG  
90%

hCG rate distribution among clinical failures (n:11)

## 4. Prospective study results (3/6)

<i>TVuS results</i>	<i>Code</i>	<i>Effectifs</i>	<i>fréquence</i>
<i>vacuity</i>	<i>1</i>	<i>0</i>	<i>0%</i>
<i>rétenction doppler -</i>	<i>2</i>	<i>1</i>	<i>9%</i>
<i>rétenction doppler +</i>	<i>3</i>	<i>9</i>	<i>82%</i>
<i>Gestational sac</i>	<i>4</i>	<i>1</i>	<i>9%</i>
<i>Ongoing pregnancy</i>	<i>5</i>	<i>0</i>	<i>0%</i>
	<i>Total</i>	<i>11</i>	<i>100%</i>

Sensitivity TVuS  
90%

Ultrasound results among surgical evacuation (n:11)

## 4. Prospective study results (4/6)

TVS	Surgery evacuation	No surgery evacuation	total
1 or 2 (success)	1	40	41
3 or 4 or 5 (failure)	10	3	13
total	11	43	54

- Se  $10/11 = 90\%$ ; Sp  $40/43 = 93\%$ ;
- PPV  $10/13 = 76.9\%$ ; PNV  $40/41 = 97.5\%$



## 4. Prospective study results (5/6)

hCG	Surgery evacuation	No surgery evacuation	total
<500	1	45	46
>500	10	2	12
total	11	47	58

Se  $10/11 = 90\%$ ; Sp  $45/47 = 96\%$ ;

PPV  $10/12 = 83.3\%$ ; NPV  $45/46 = 97.8\%$

## 4. Prospective study results (6/6)


- Same Se, Sp and NPV(negative predictive value).
- Best PPV (positive predictive value) of biology: 83.3 % versus sonography 76.9 %
- When hCG rate  $\geq 500$ UI/l from D21 to D25, risk of failure increases, which require a surgical aspiration.
- When hCG  $< 500$ UI/l, medical abortion is a success in the vast majority of cases.
- the Ultrasonic control remains highly operator dependant, as well as equipment dependant

# Summary 1/2

- This study provide evidences through a significant sample ( #1240), that hCG dosage (threshold value 500mUI/l from D21 to D25) appears to be as reliable as (and possibly more than) an ultrasound check carried out by a skilled operator using a good equipment.

# Summary 2/2

- Informing patients and providers
- Biologic control in FIRST INTENTION
- Sonographic control when hCG >500 (10%)
  - 2 SONOGRAPHIC CRITERIA
    - massive signal
    - at least 2 incidences (sagittal and transverse)
- Take into account the presence of clinical symptoms



**hCG < 500:**

**New gold standard of  
success?**

**MANY THANKS FOR YOUR  
ATTENTION TODAY  
IN EDIMBURGH!**

