

# CIRA Case of the Week

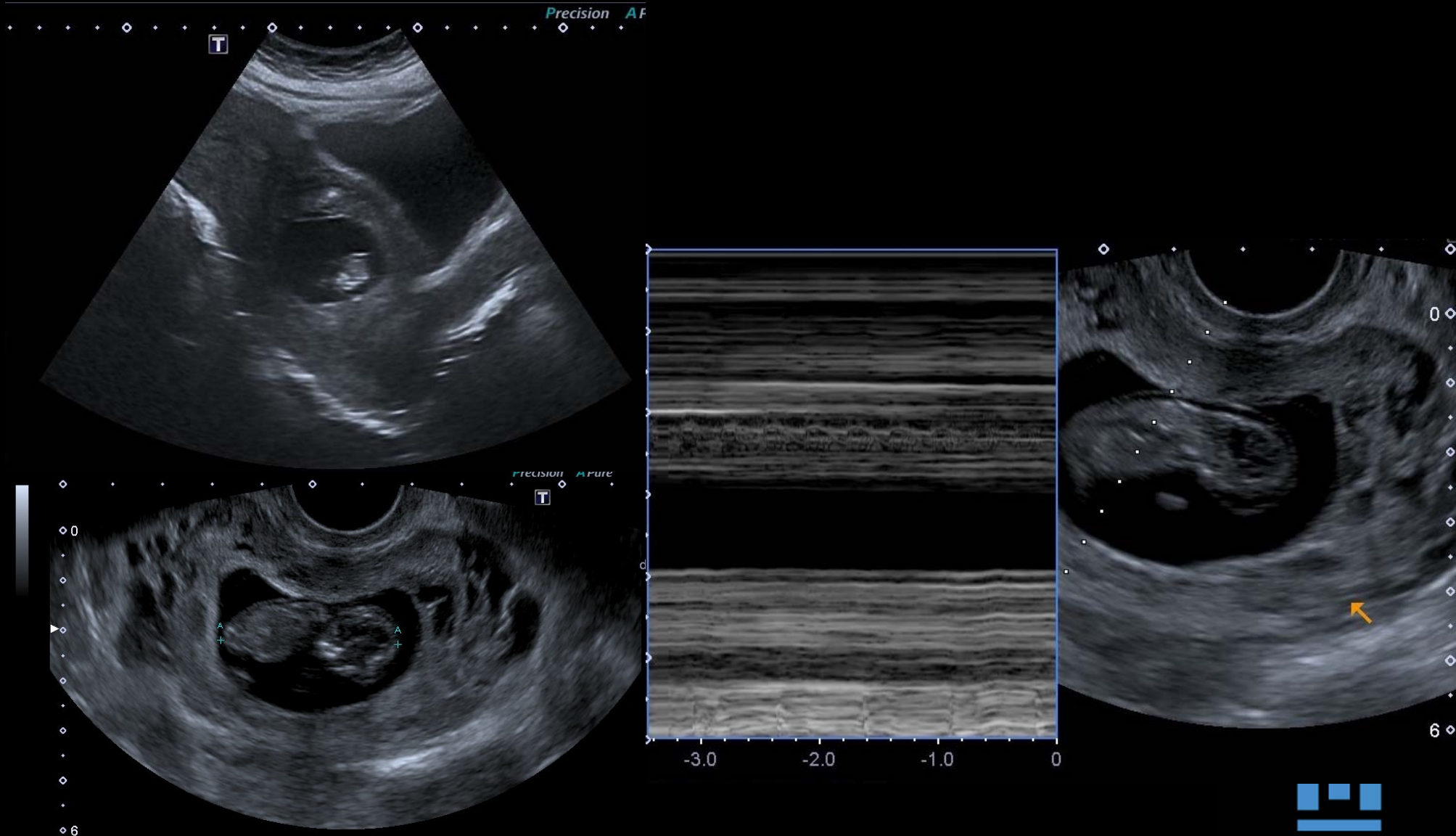
## August 2016

Case Courtesy of Fr. Ali Bessissow MD FRCPC  
Centre Hospitalier de l'Université de Montréal  
(CHUM)

# Clinical History

- 37 year old woman, G8P1A6
- Presented to the Emergency Department with vaginal bleeding & positive pregnancy test
- Labs: all normal, BHCG + (98 245)
- Ultrasound evaluation was performed

# Ultrasound

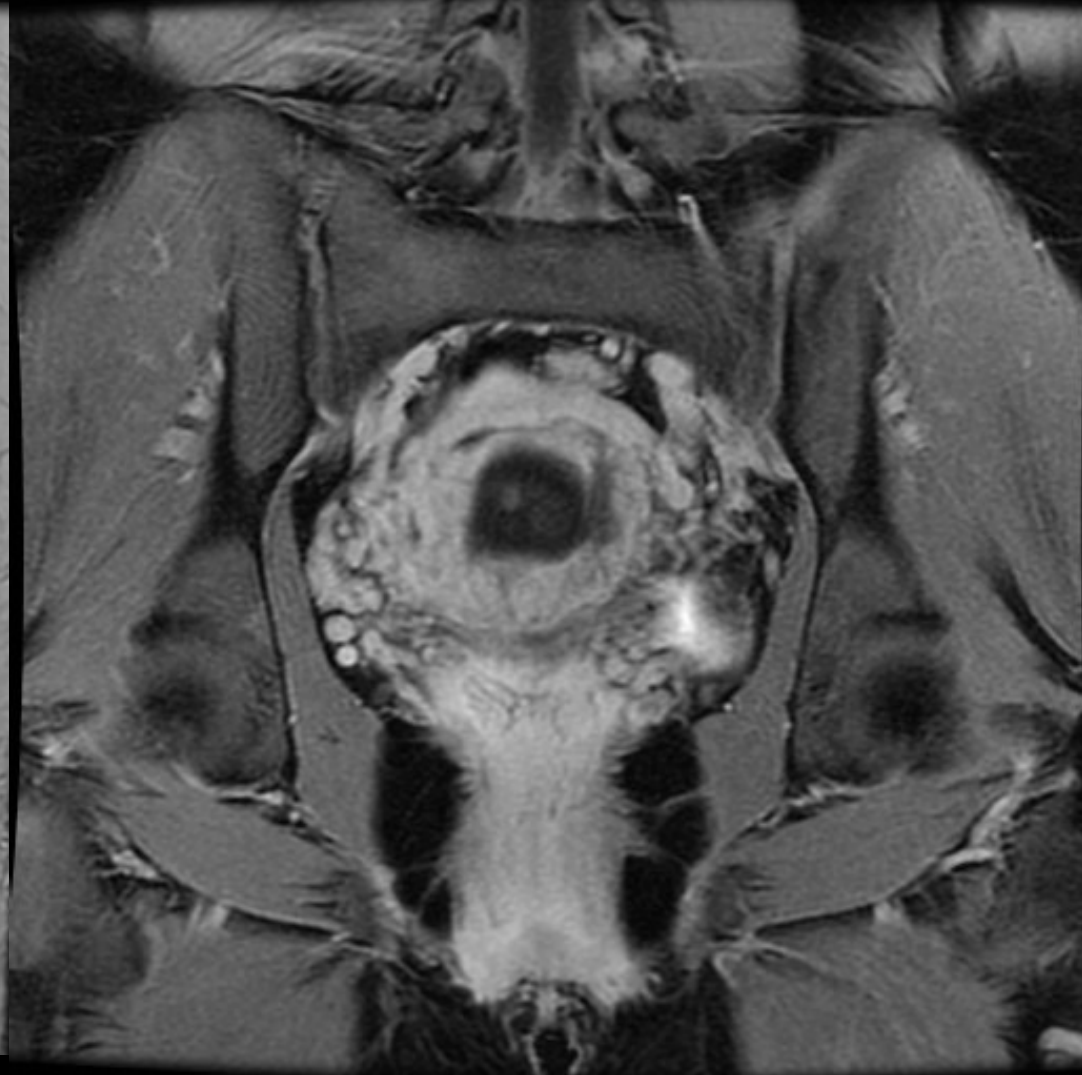
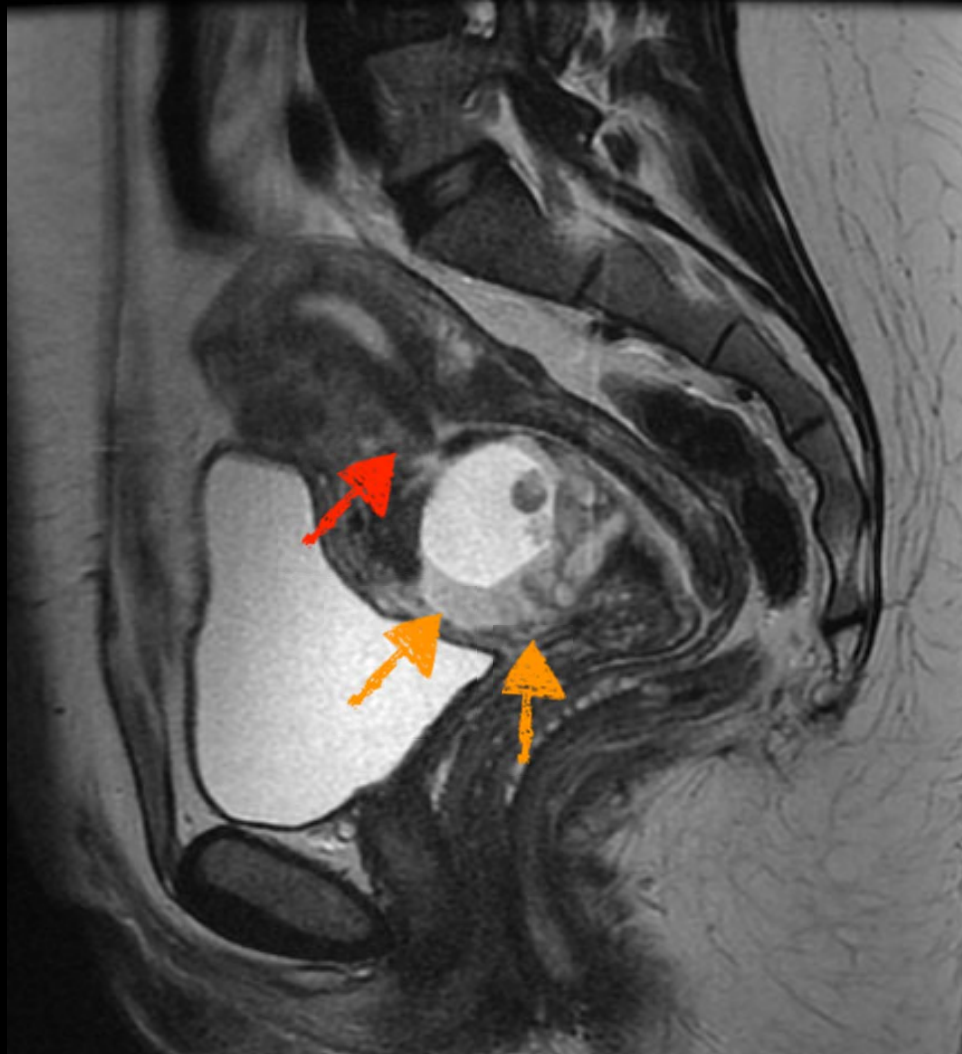


Dist A 35.5 mm

# Ultrasound

- Live ectopic pregnancy was diagnosed
- The ectopic pregnancy was cervical or in a cesarian scar
- Estimated at 9 weeks & 3 days
- An MRI was performed for further characterization

# MRI



# MRI

MRI showed a highly vascular mass compatible with an ectopic pregnancy (**orange arrows**) in a caesarean scar (**red arrow**)

# Clinical Course

- The patient was treated with a week course of IV Methotrexate
- On a repeat US performed after one week, the foetus was still alive and the BHCG plateau-ed at 76 000
- The patient was offered a hysterectomy but she refused because of a desire for a future pregnancy
- IR consulted, what next?

# Literature Review

## **Treatment of Viable Cesarean Scar Ectopic Pregnancy with Combination of Intracardiac KCI and Systemic Methotrexate: Case Report**

Gürkan Yazıcı, Aysun Savaş, Talat Umut Kutlu Dilek, Saffet Dilek

*Mersin Üniversitesi Tıp Fakültesi, Kadın Hastalıkları ve Doğum Anabilim Dalı, Mersin, TR*

*Ultrasound Obstet Gynecol* 2005; 25: 282–288

Published online in Wiley InterScience ([www.interscience.wiley.com](http://www.interscience.wiley.com)). DOI: 10.1002/uog.1822

## **Non-surgical management of live ectopic pregnancy with ultrasound-guided local injection: a case series**

A. MONTEAGUDO, V. K. MINIOR, C. STEPHENSON, S. MONDA and I. E. TIMOR-TRITSCH

*Department of Obstetrics & Gynecology, Division of Ob/Gyn Ultrasound, New York University School of Medicine, New York, NY, USA*

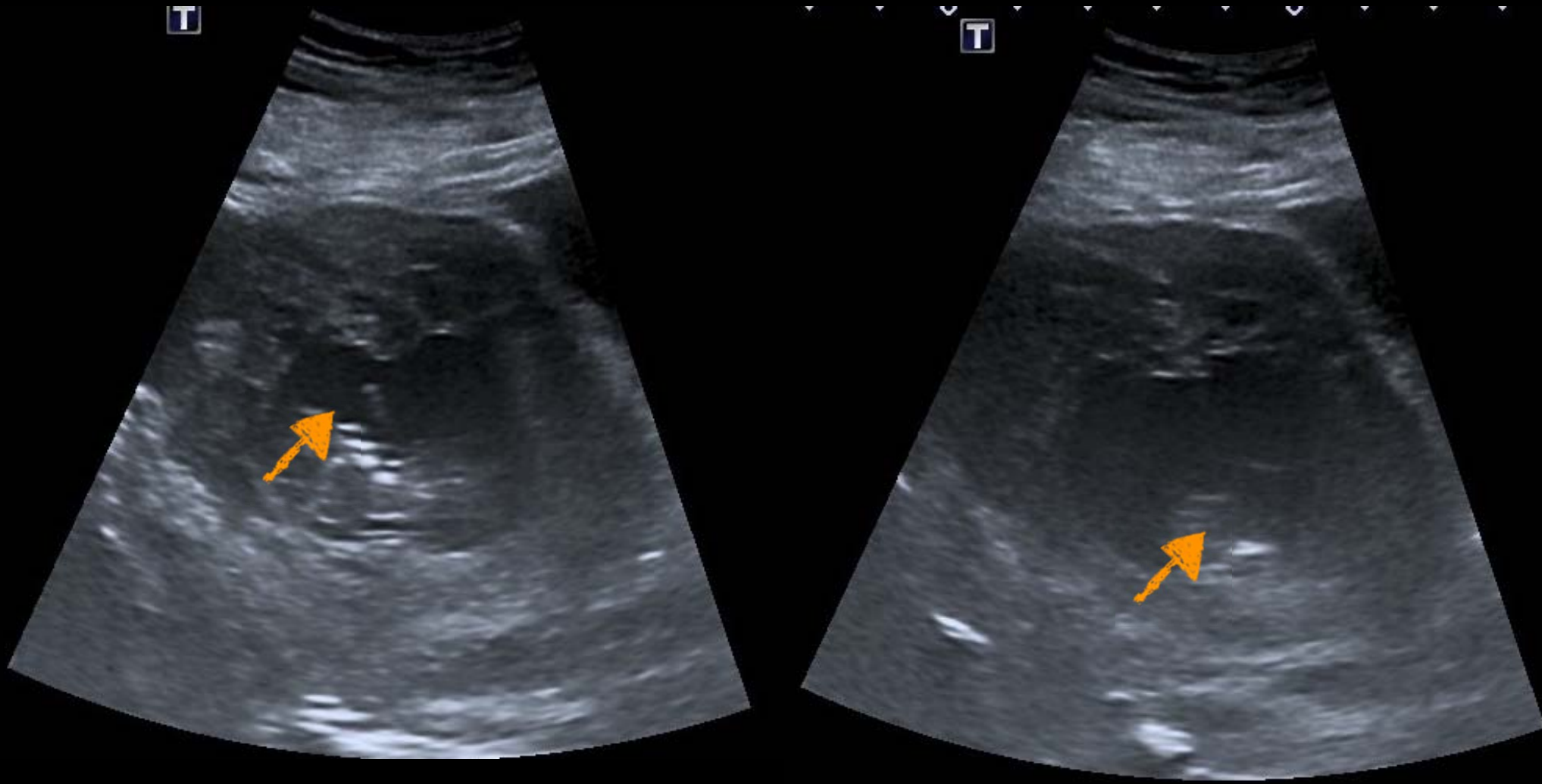
# Literature review

- Options :
  - US guided **intra-thoracic KCL** injection  
2meq/cc (1-3cc)
  - US guided **Methotrexate** injection 25mg (1cc)  
in the **gestational sac**
  - Uterine artery embolization with systemic  
Methotrexate

# Therapy

- After meeting with the patient, we decided to treat the ectopic pregnancy with an intra-thoracic KCL injection
- Methotrexate was ordered in case the KCL didn't work
- The patient received a course of antibiotics before the procedure

# Intra-thoracic KCL injection

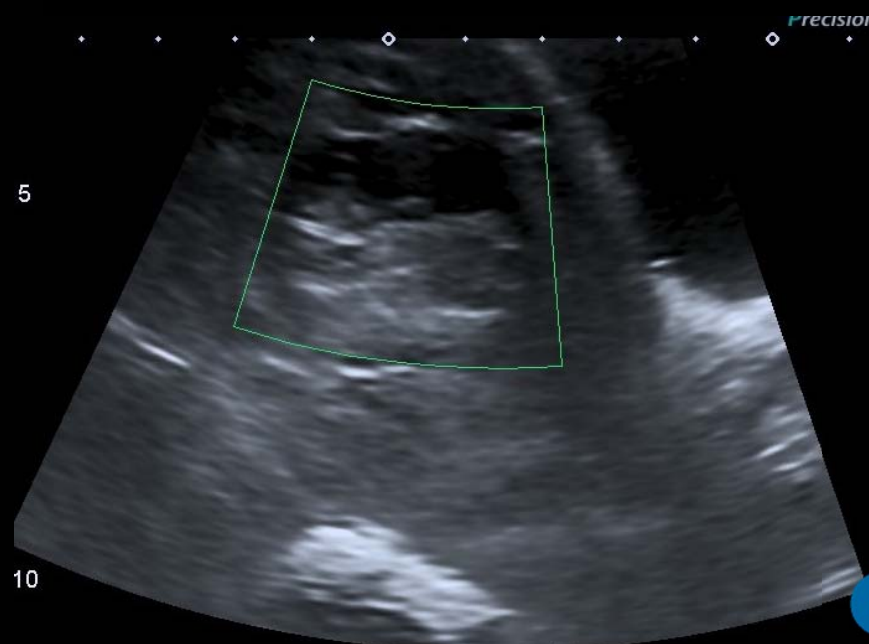


# Intra-thoracic KCL injection

- More difficult than it appears because of the foetal position & movements
- Emotionally hard for the mother & operator because of the foetus reaction to the needle
  - Mother required a lot sedation ++++
- **The foetus was still alive after intra-thoracic KCL injection ...**
- What next?

# Methotrexate injection in GS

- We slightly retracted the needle & injected 25mg of Methotrexate in the gestational sac



# Methotrexate injection in GS

- Immediate arrest of foetal movement & heart beat after Methotrexate injection
- 20 min after the injection;
  - Foetal death confirmed
  - Absence of doppler flow in & around the gestational sac

# Clinical course

- Patient had no complication related to the procedure
- BHCG dropped rapidly

B-hCG (Quant.)	3.8	U/L
B-hCG (Quant.)	6.1	U/L
B-hCG (Quant.)	7.6	U/L
B-hCG (Quant.)	9.9	U/L
B-hCG (Quant.)	17.8	U/L
B-hCG (Quant.)	24.5	U/L
B-hCG (Quant.)	65.9	U/L
B-hCG (Quant.)	70.5	U/L
B-hCG (Quant.)	131.5	U/L
B-hCG (Quant.)	226.8	U/L
B-hCG (Quant.)	311.1	U/L
B-hCG (Quant.)	550.0	U/L
B-hCG (Quant.)	2084.0	U/L
B-hCG (Quant.)	22813.0	U/L
B-hCG (Quant.)	34151.0	U/L
B-hCG (Quant.)	43074.0	U/L
B-hCG (Quant.)	46791.0	U/L
B-hCG (Quant.)	51114.0	U/L
B-hCG (Quant.)	55472.0	U/L
B-hCG (Quant.)	76739.0	U/L
B-hCG (Quant.)	78527.0	U/L
B-hCG (Quant.)	98245.0	U/L

# Follow up

- 1 month ultrasound follow up showed
  - A non viable foetus with a gestational sac that had slightly decreased in size
- 2 month post procédure
  - The patient had a spontaneous abortion

# Discussion

- Ultrasound guided injection for ectopic pregnancy is an option when medical therapy is unsuccessful
- Gestational sac Methotrexate injection is;
  - Easier and faster
  - Less emotional difficult for the mother & operator
  - More immediate result
- The patient may require sedation +++