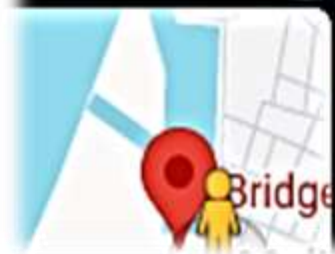


بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

POST SEMINAR NOTES

1



By

Dr. Ahmad Mokhtar Abodahab – MD



Staff Member , Consultant & PACS Administrator

Radiology Department- Faculty of Medicine – Sohag University, Egypt

Certified Trainer

Supreme Council of Egyptian Universities

(Former) Vice Manger

Sohag University New Hospital

Speaker

Virtual Medical Academy (VMA) , KSA

(Former) Radiology Consultant /Senior Registrar

Sohag Military Hospital & Police Clinics, Egypt

Saudi German Hospital (SGH), Hail - Olaya Medical Center (OMC) Riyadh – KSA

Mulee Regional Hospital , Maldives



POST SEMINAR

CASES PRESENTATION
RESEARCH SUMMARY
CLINICAL NOTES

Good Luck

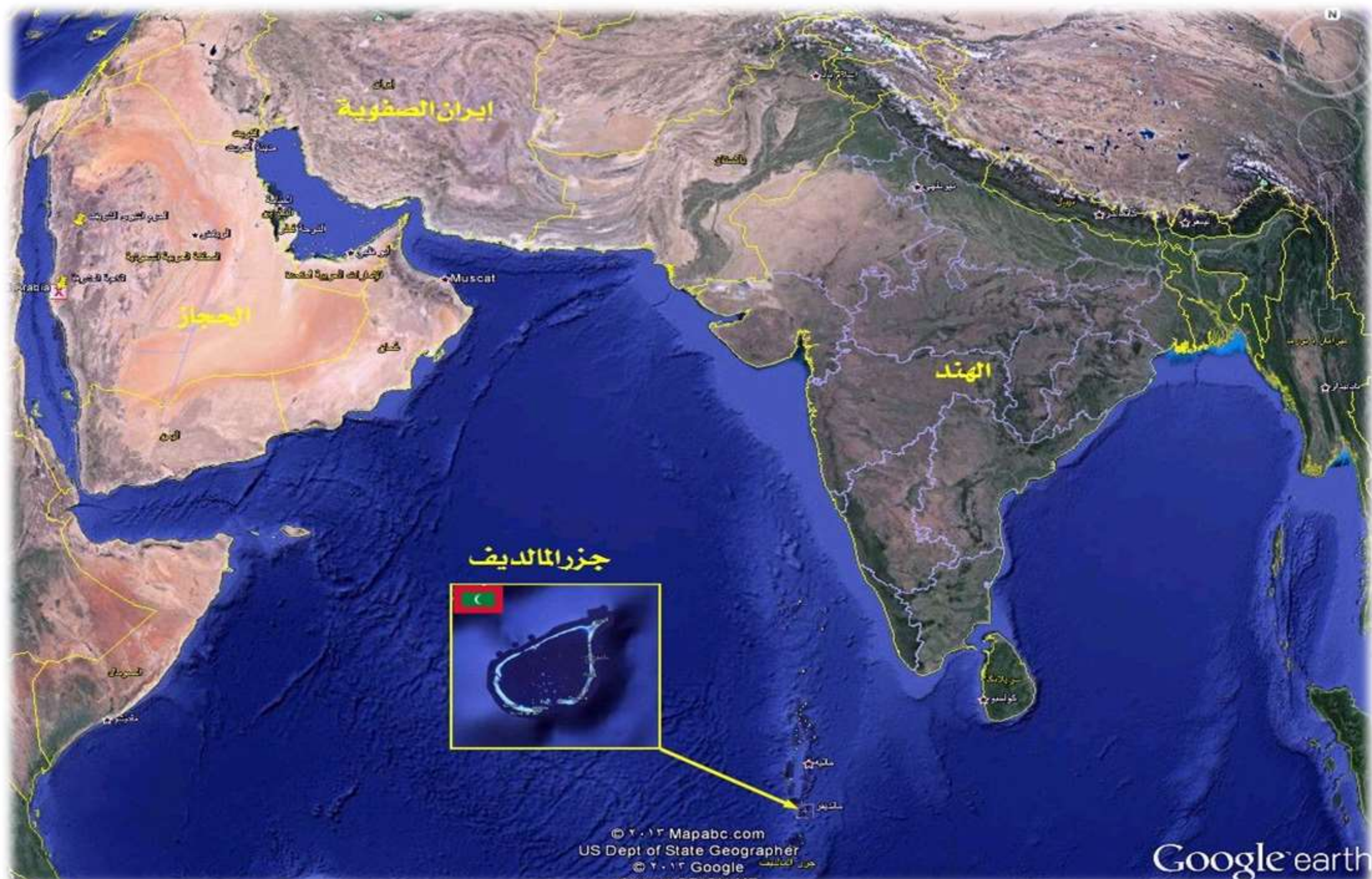
Dr. AHMAD MOKHTAR

ABODAHAB

CASE STUDY



INTRODUCTION



ايران الصفوية

الحجاز

الهند

جزر المالديف



FREE PALESTINE



FREE GAZA



تسجيل الدخول

Google Maps





1200 Island



298 Km²



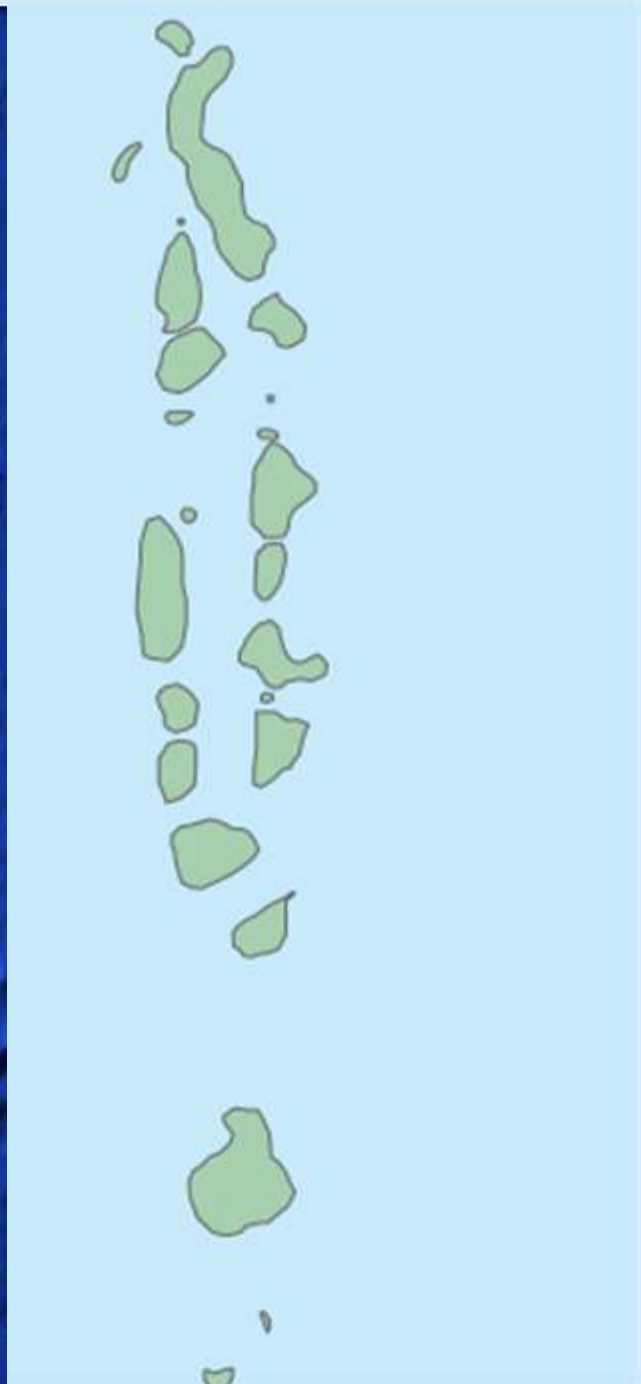
200 Occupied



26 Atoll



500.000 population



FREE PALESTINE



FREE GAZA



Dhiggaru

Raiymandhoo

Veyvah
Mulah

Muli

Naalaafushi

Kolhufushi

Google Maps

FREE PALESTINE



FREE GAZA

Malé



Malé

Maldives



Mostly cloudy · 27°C
3:53 PM



Directions



Saved (2)



Nearby



Send to phone



Share

Quick facts

Malé is the densely populated capital of the Maldives, an island nation in the Indian Ocean. It's known for its mosques and colorful buildings. The Is... More



Saved in Favorites & Starred places



Restaurants

Hotels

Things >



FREE PALESTINE



FREE GAZA

FREE PALESTINE



FREE GAZA





Muli Regional Hospital



6 Specialists 6 Medical Officers 1 Dentist

(Obst – Ped – Surg
Anath – Rad – Intern)



WORK SCHEDULE

6 DAYS SAT:THURS “**8 AM:4 PM**”

EMERGENCY 24/7

CASE PRESENTATION

PRESENTATION

21 Dec 2024, 7.30 pm

- Female Patient, 25 y
- Pregnant
- Gestational diabetes mellitus
in the previous and current pregnancy



PRESENTATION

- Presented with Left lower abdominal pain to Obstetric ER in Multi regional hospital,
- Pregnancy followed up
- Gestational age of 36 weeks to ER

History

2nd Jan 2022



- the patient who was married 2 years ago, presented for the first time to the hospital for her 1st pregnancy follow-up

CLINICAL



Full Clinical, Obst. & Lab Assessment

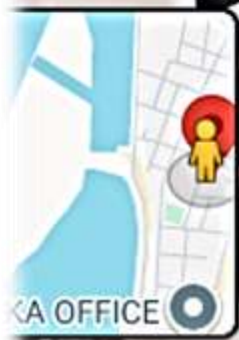
Mulee Regional Hospital

Dr. Ahmad Mokhtar Abodahab

Photo - Jul 2025

Share

RADIOLOGICAL ASSESSMENT



Google Maps



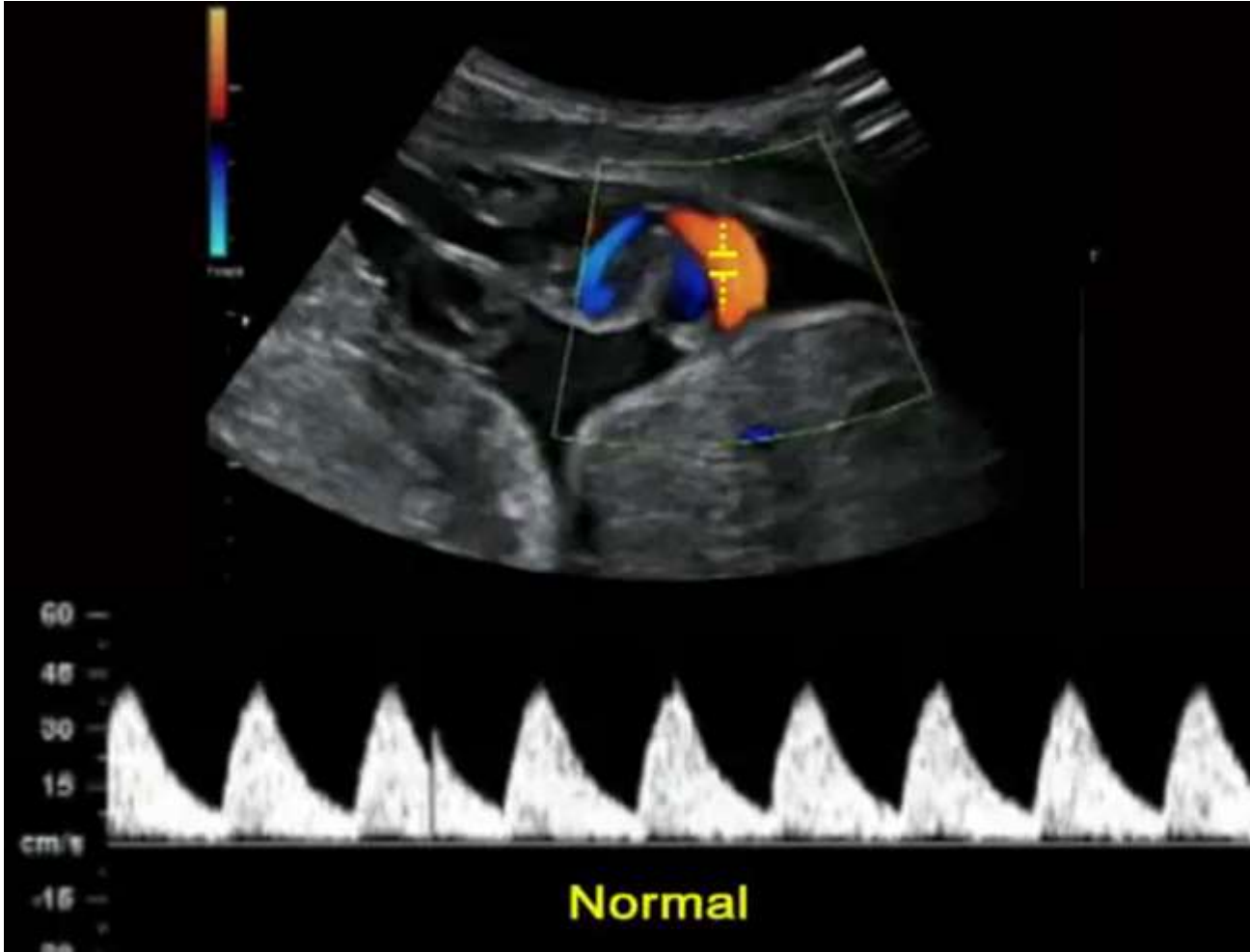
BASICS OF

Umbilical

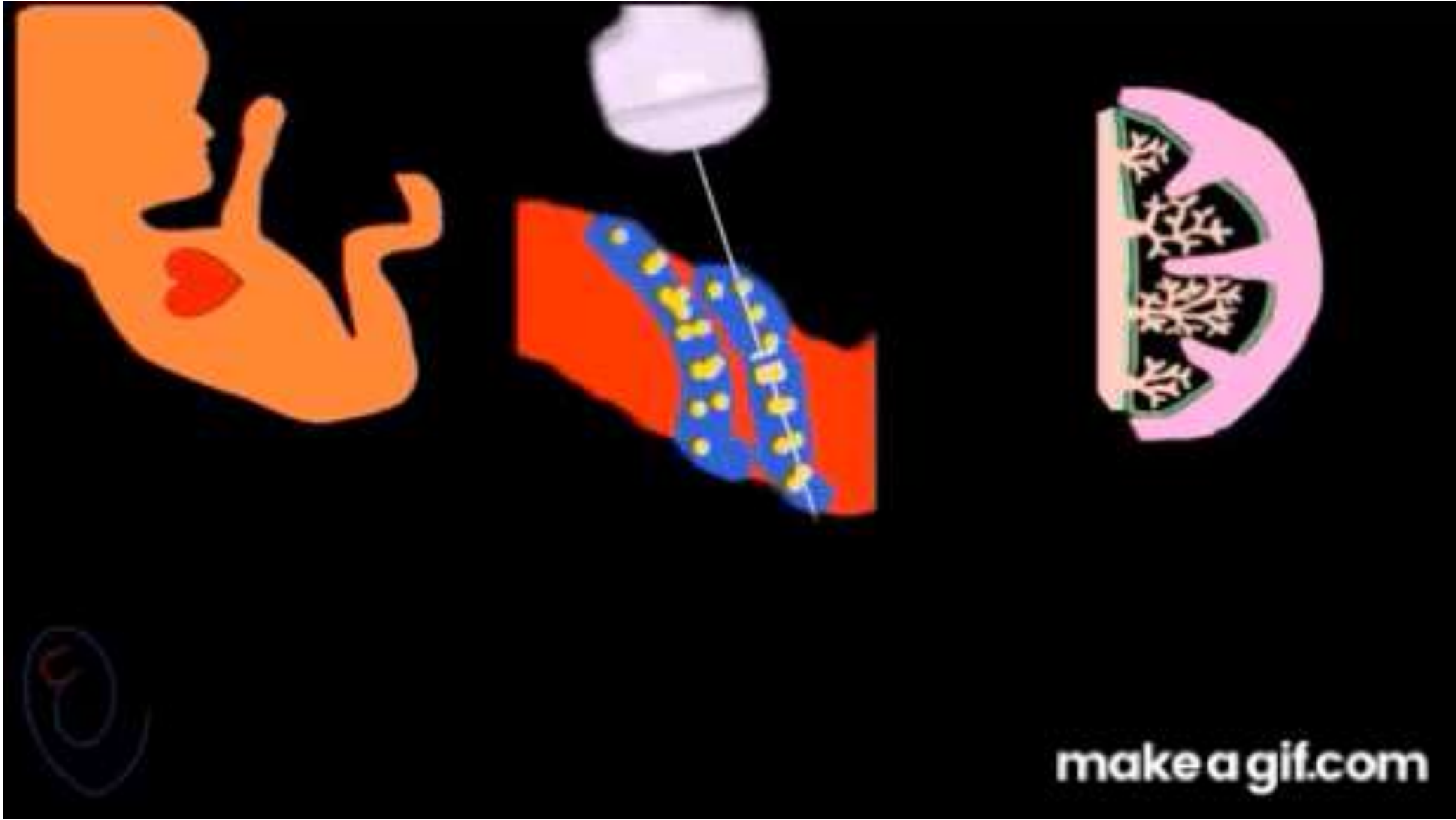
Artery Doppler

In Brief ?





Biphasic Flow “Saw Tooth appearance”



make a gif.com

FREE PALESTINE



FREE GAZA

↓ Placental resistance



↑ Placental resistance



FREE PALESTINE



FREE GAZA

make a gif.com

How to do Umbilical Artery
Doppler?

FREE PALESTINE



FREE GAZA



Narrow the color box

FREE PALESTINE



FREE GAZA



Narrow the color box

FREE PALESTINE



FREE GAZA

FREE PALESTINE

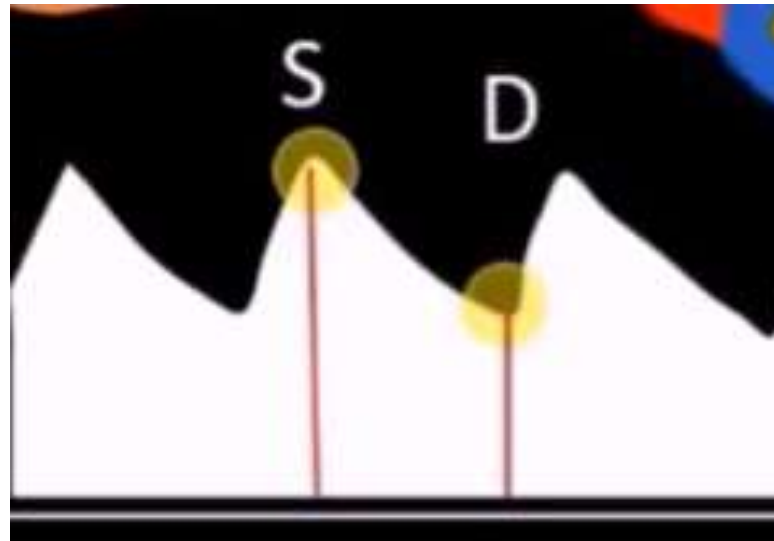


FREE GAZA



imgflip.com **Apply the pulsed wave gate**

PSV	Peak Systolic Velocity
EDV	End Diastolic Velocity
PI	Pulparability Index
RI	Resistive Index
SD Ratio	Systolic Diastolic Ratio



Indices Summary

Rough measures



Age w	SD	PI	RI
20	< 6	1.5	0.85
25	< 5	1.4	0.80
30	4	1.3	0.75
35	< 3.5	<1.2	0.70
40	< 3.2	1.08	< 0.60

N.B. this table representing the nearest approximation of upper limits of values , just for simple memorization & as a rough indicators More reference & details are needed



IN Placental insufficiency → less blood reach brain →

MCA vasodilatation → Decrease resistance.

“Brain sparing effect”

NORMALY MCA Indices > UA

FREE PALESTINE



FREE GAZA

RADIOLOGICAL



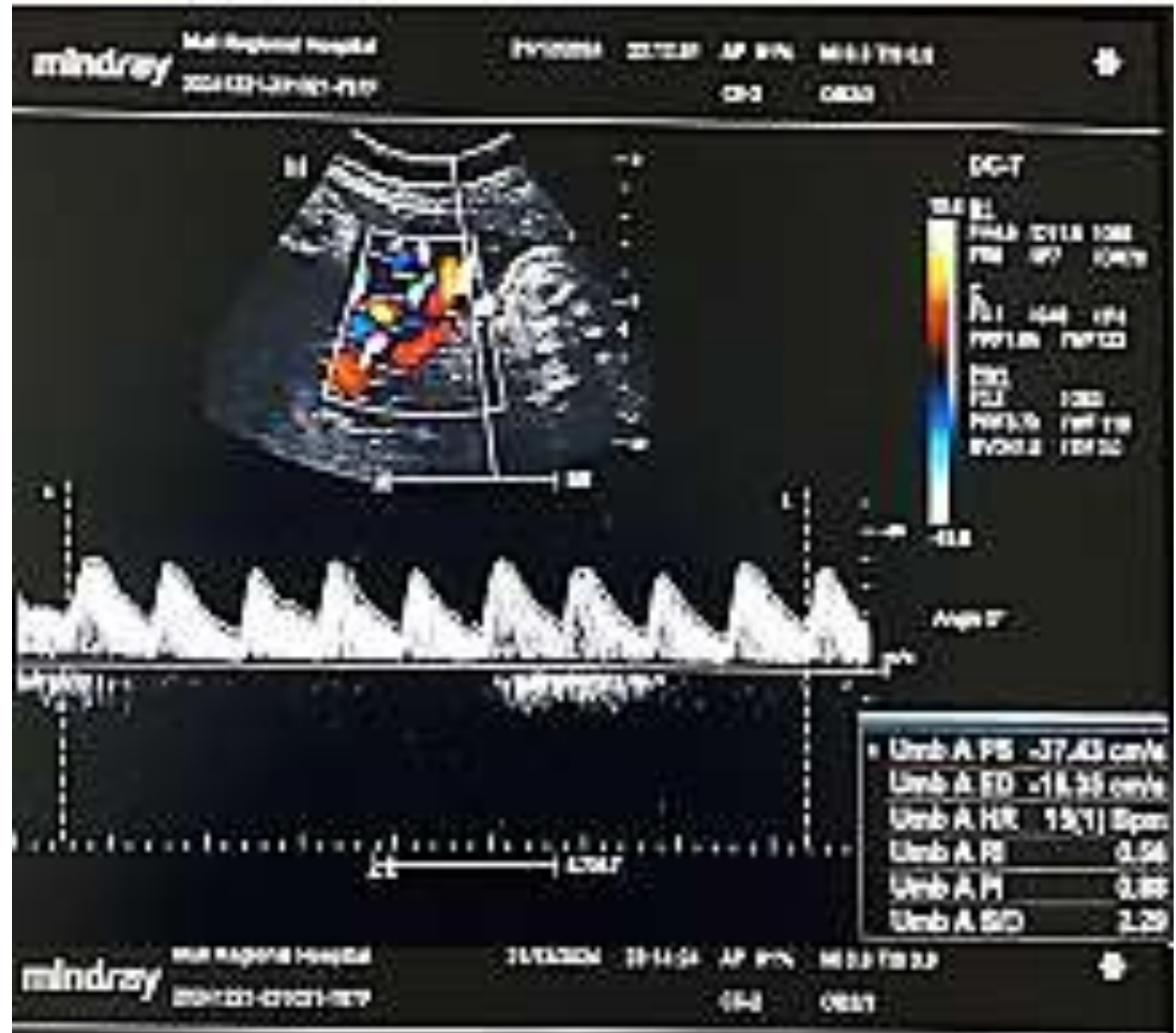
- * **Abd US** → - Bilateral Mild Backpressure
- Gall bladder stone was 8 mm with no other abnormalities.



Obstetric Color Doppler

- After full adjustment of setting and mode of examination, color gain and
 - Applying pulsed wave doppler gate on the middle part of the clear segment of umbilical artery at the middle zone between fetus and placenta,
- repeated measures were done and revealed **significant variabilities.**

- The UA Doppler waveform was normal as some scans (Fig.1) with minimal changes of indices (SD Ratio, RI and PI) in the normal range for correlated gestational age.



But other scans

showed:

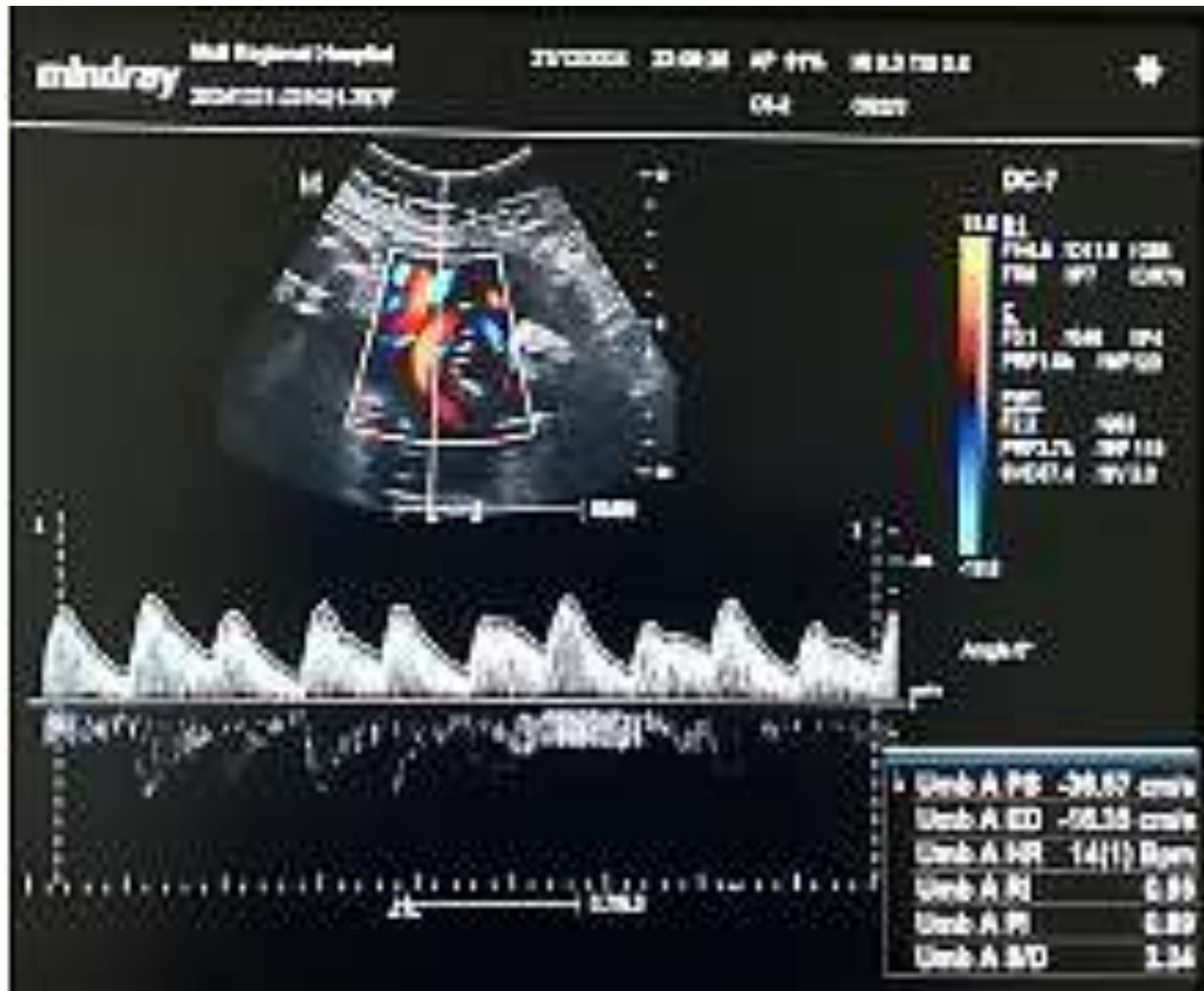
unusual intermittent

irregularities mainly

involving EDV with

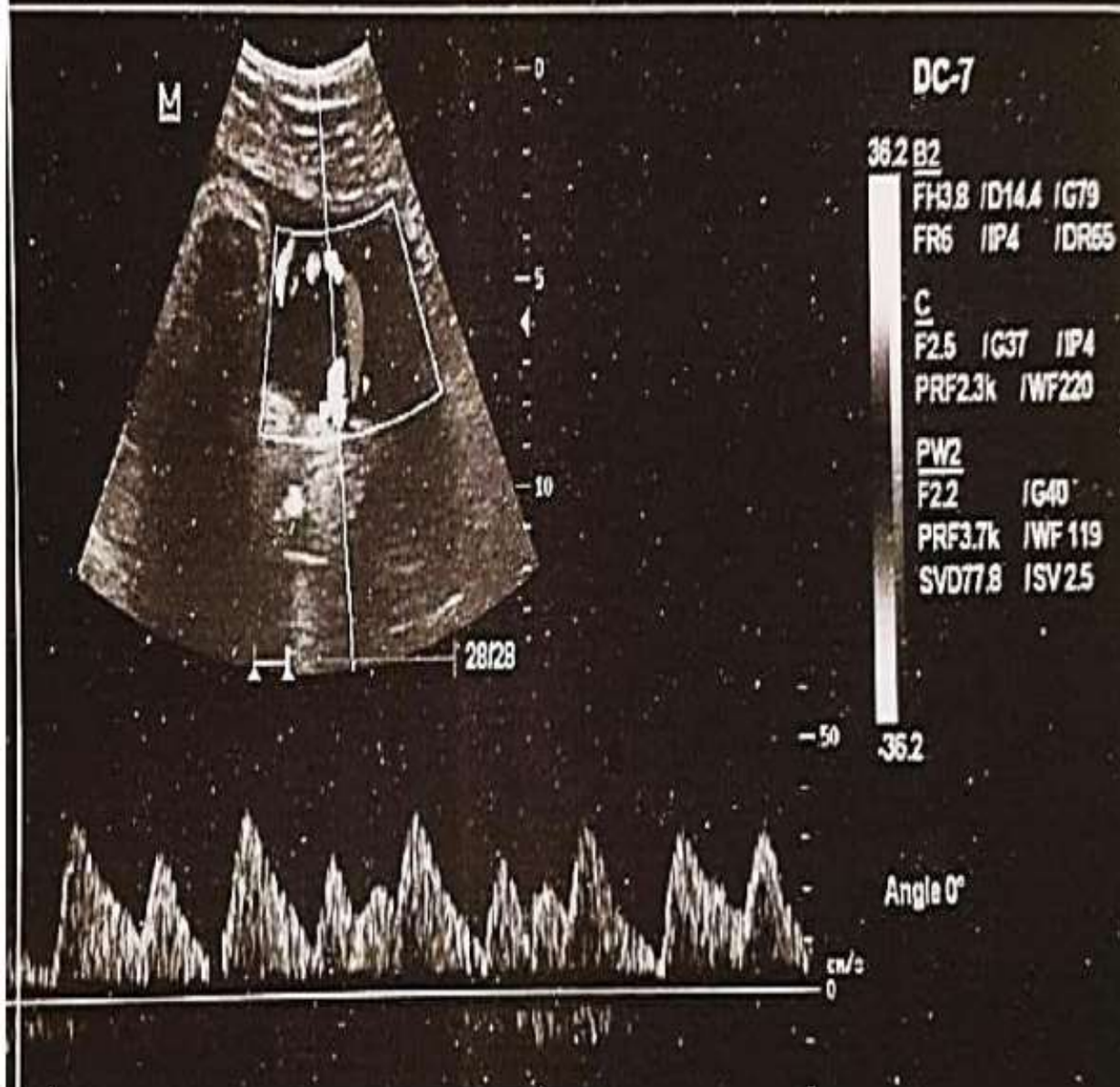
significant unexplained

variability (Fig.2).

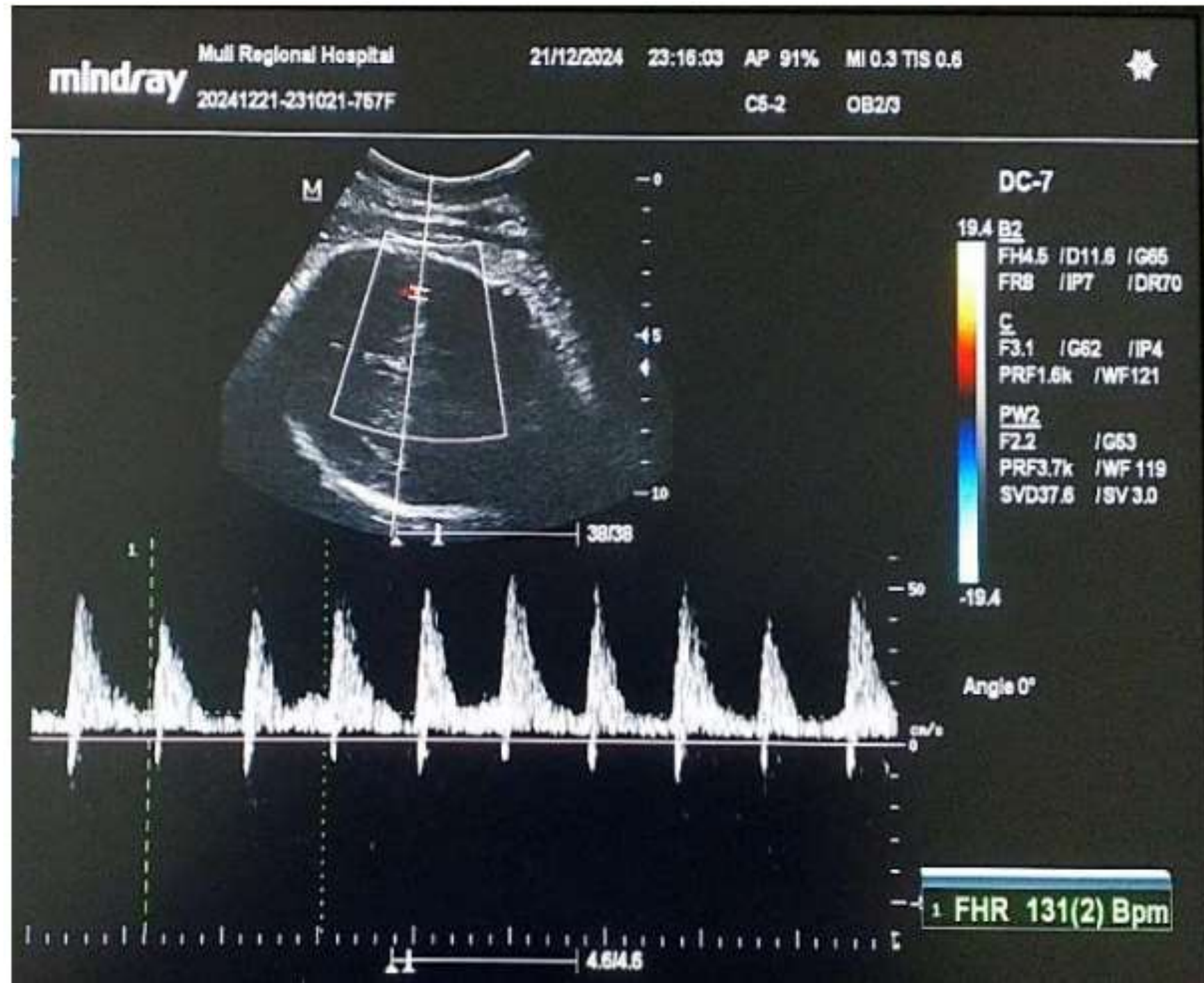




C6-2 Adult ABD



MCA doppler parameters were normal indicators and flow patterns during this scan (Fig 3)





Next Day

mindray

Mull Regional Hospital

22/12/2024 09:55:41 AP 91% MI 0.3 TIS 0.6



C5-2 OB2/3



DC-7

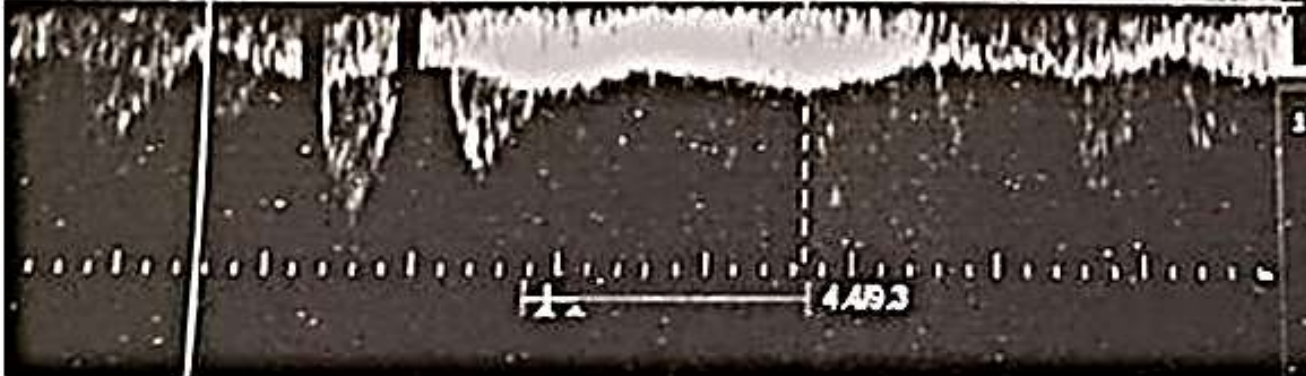
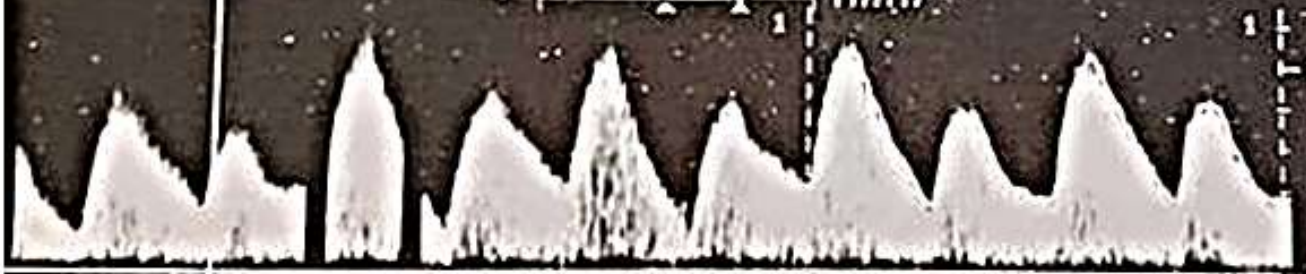
21.3 B1
 FH4.5 ID8.7 IG65
 FR9 IP7 IDR70

C
 F3.1 IG27 IP4
 PRF1.7k /WF133

PW1
 F2.2 IG53
 PRF3.7k /WF 119
 SVD42.1 /SV 1.5

-21.3

Angle 0°



1 Umb A PS 54.64 cm/s
 Umb A ED 18.50 cm/s
 Umb A HR 36(1) Bpm
 Umb A RI 0.66
 Umb A PI 1.11
 Umb A SID 2.05

FREE PALESTINE



FREE GAZA



Follow UP Color Doppler assessment of the case in the next day follow up, showing

A- **increased indices of UA Doppler** with persistent flow irregularity and

B- **Decreased indices of MCA** denoting vasodilation changes associated with placental insufficiency with associated flow

irregularity.

C. **The significant intermittent unexplained flow irregularity**

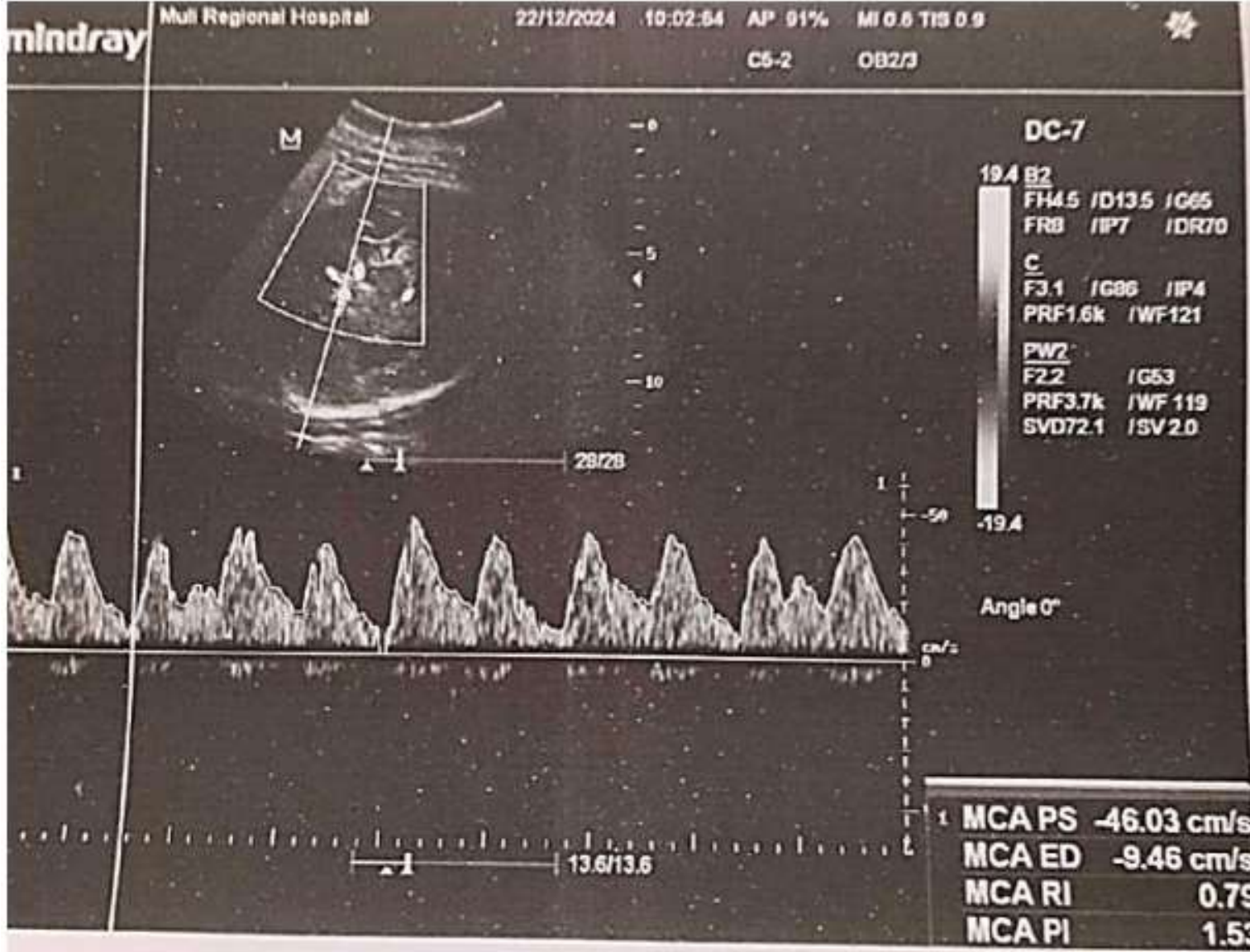


Table 1: The reported average of Different parameter during doppler scan and follow up of the case.

Artery & Parameters		PSV	EDV	SD Ratio	RI	PI
1 st Scan	UA	45.6 cm/s	16.7 cm/s	2.72	0.63	1.04
	MCA	51 cm/s	< 5 cm/s	-	1	2.84
Follow Up	UA	cm/s		3.06	0.67	1.12
	MCA	46 cm/s	9 cm/s	-	0.79	1.54

FREE PALESTINE



FREE GAZA

CS WAS DONE

**NORMAL
BABY**



Tru cord knot with discovered after caesarian section.



Fetal Doppler Irregularity, A Warning Sign of Cord Knot: Case Report

Ahmad M. Abodahab^{1,2,}, Mohammed S. Korany^{3,4} and AbdelAzim Elsergany^{5,6}*

¹ Radiology Department, Faculty of Medicine, Sohag University, Sohag, Egypt.

² Radiology Consultant, Muli Regional Hospital, Meemu Atoll, Maldives.

³ Gynecology & Obstetrics Consultant, Egypt Air Hospital, Cairo, Egypt.

⁴ Gynecology & Obstetrics Consultant, Muli Regional Hospital, Meemu Atoll, Maldives.

⁵ Pediatric Department, Bab El sharia Hospital, Cairo University, Cairo, Egypt.

⁶ Pediatric Consultant, Muli Regional Hospital, Meemu Atoll, Maldives.

Received: 15 Sep. 2024, Revised: 5 Nov. 2024, Accepted: 1 Dec. 2024.

Published online: 1 Jan. 2025.

<https://www.naturalspublishing.com/files/published/6n174brbf71090.pdf>

CONCLUSION

- Umbilical cord knot is a dangerous finding that can lead to fetal morbidity or sudden unexpected or explained IUFD.
- Color Doppler of **UA** and **MCA** is a common method for assessing placental and fetal blood flow integrity and dynamic indices.
- Umbilical **cord knots** are relatively more to occur with prolonged cord,

CONCLUSION



- Diagnosis with color doppler alone is not an easy mission,
- It may be relatively easier by using **4D scan**.
- **This case report** approved that the dynamic changes of wave from irregularity can be an indicator for prediction cord knot and make the suitable decision of terminating pregnancy for saving the life of the fetus
- which can be seriously threatened by significant cutoff blood supply by more tension applied on the knot either by **maternal** or **fetal motility**.

Fetal Doppler Irregularity, A Warning Sign of Cord Knot: Case Report

Ahmad M. Abodahab^{1,2,*}, Mohammed S. Korany^{3,4} and AbdelAzim Elsergany^{5,6}



FREE PALESTINE



FREE GAZA

FREE PALESTINE



FREE GAZA

THANK YOU

FREE PALESTINE



FREE GAZA



Dr. A. M. ABODAHAB MD

OCT 2025