



#### **TRAINING ON**

## INFERTILITY AND ASSISTED REPRODUCTION



AT KAIRUKI GREEN IVF

**BUNJU 'A' MIANZINI** 

DAR ES SALAAM, TANZANIA





# ROLE OF ULTRASOUND IN FERTILITY TREATMENT:



- INTRODUCTION
- •REASONS OF ULTRASOUND PRIOR/DURING IVF TREATMENT.
- ■TECHNIQUES ON HOW TO PERFORM ULTRASOUND SCAN.
- **SUMMARY.**



#### **MEANING OF ULTRASOUND**

Diagnostic- Imaging modality that uses high frequency sound waves (above 20,000HZ) to produce body image.

Treatment-Technique where by an ultrasound beam is brought to a tight focus in the fibroid and adenomyosis heating up the tissue within and destroying the diseases tissue without causing any harm to the surrounding tissue.

#### Ultrasound over other imaging modality during IVF.

- a. No ionizing radiation exposure.
- b. Shows movements of body internal organs as well as blood flowing through blood vessels.
- c. Body organs are captured in real time.



#### **REASONS FOR DOING ULTRASOUND:**

#### **Prior ivf treatments**

- \*Baseline screening ultrasound to asses pelvic (treatment, dosage any other information before ivf treatment).
- Saline infusion sonograms.
- Trans abdominal ultrasound can be needed with any of the above.

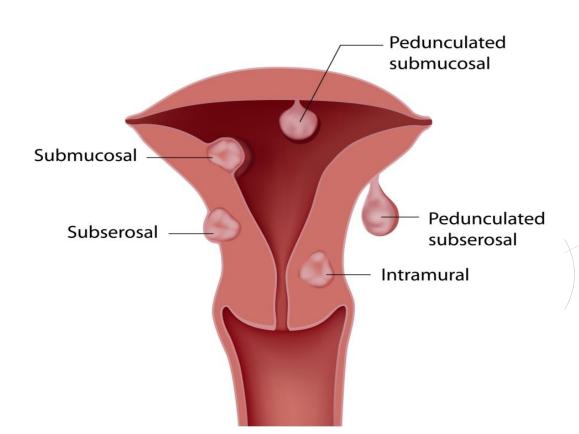
#### **During ivf treatment**

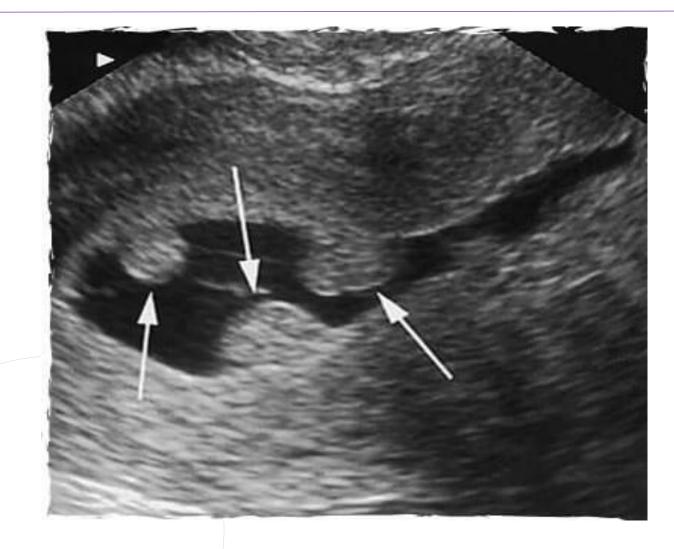
- **AFC** counting .
- Egg retrieval (collection).
- Lastly during embryo transfer (trans abdominal with the help of full urinary bladder)

#### **COMMON ANOMALIES**

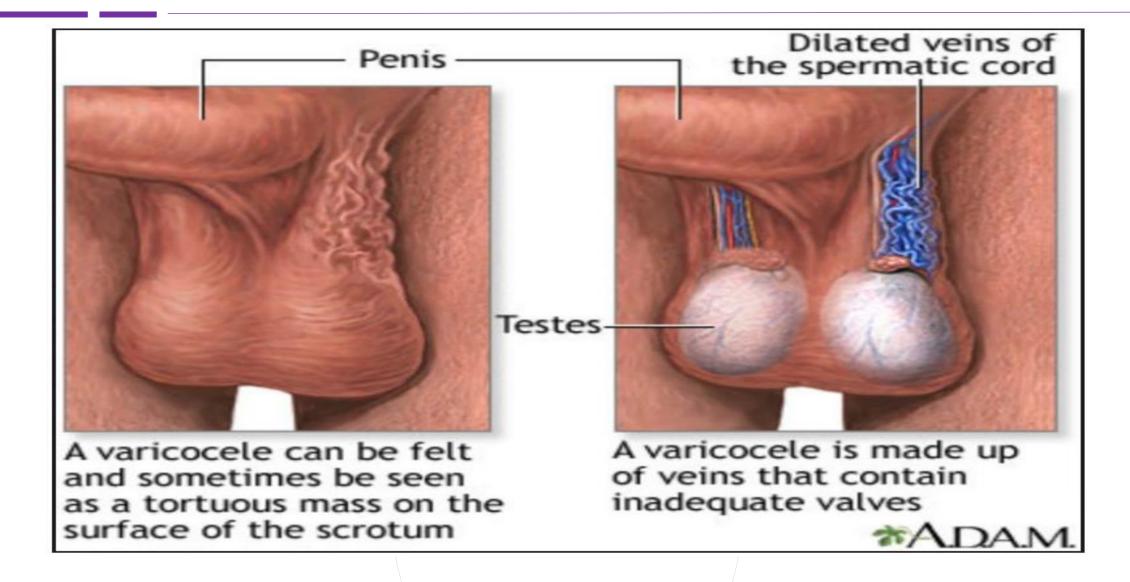
#### **FEMALE CLIENTS**

#### Uterine fibroids

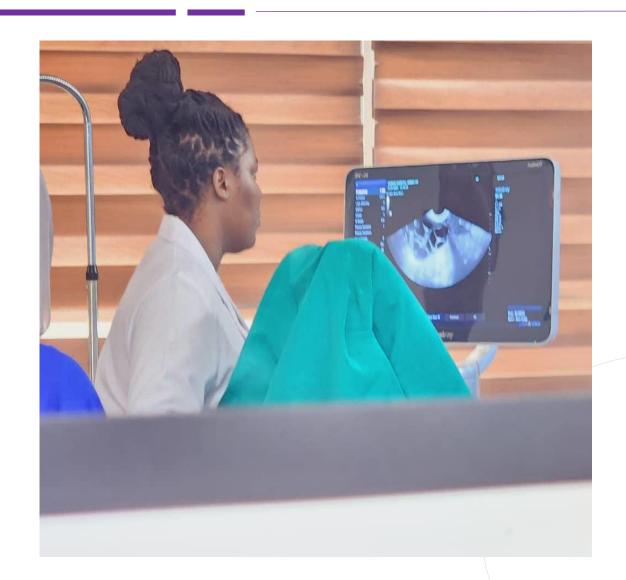


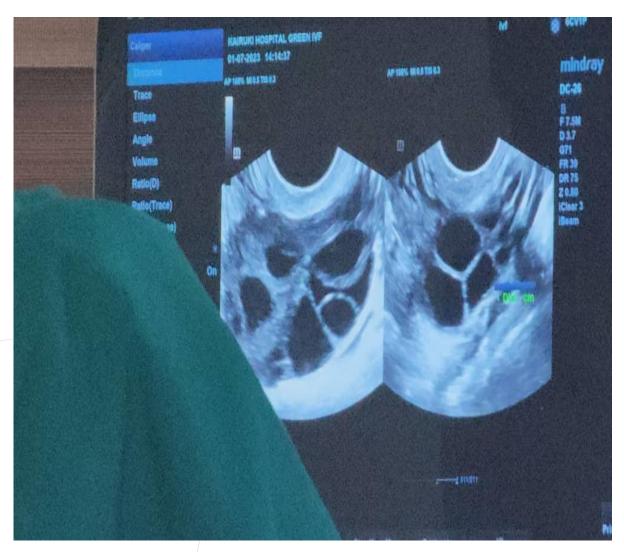


#### **MALE CLIENT**



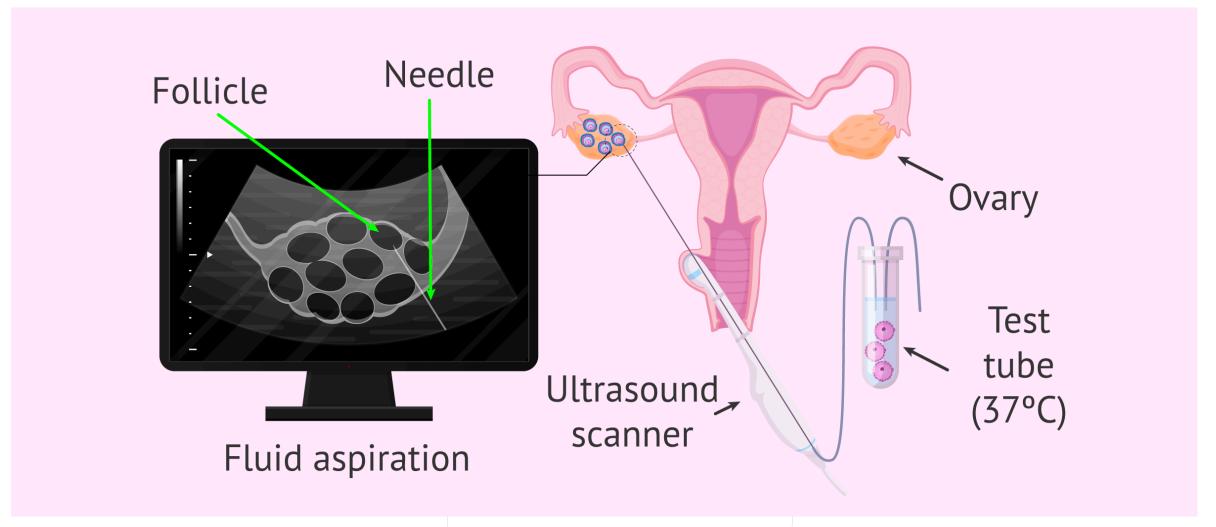
## **During IVF treatments: AFC**





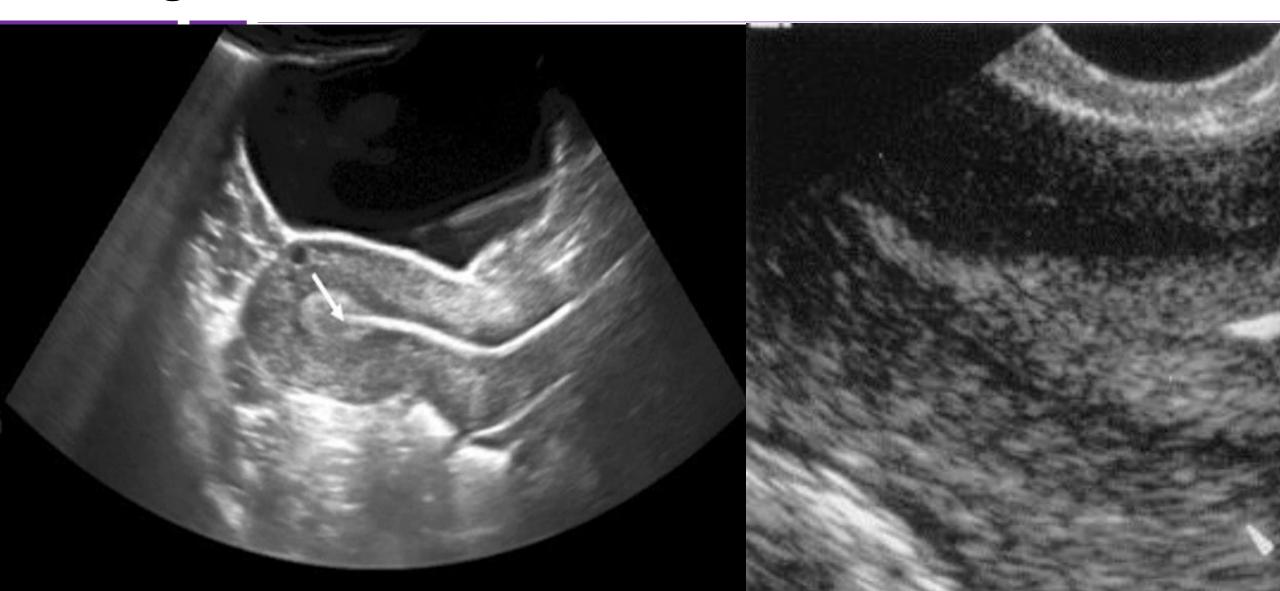
#### $\bullet$

### **Egg retrieval**

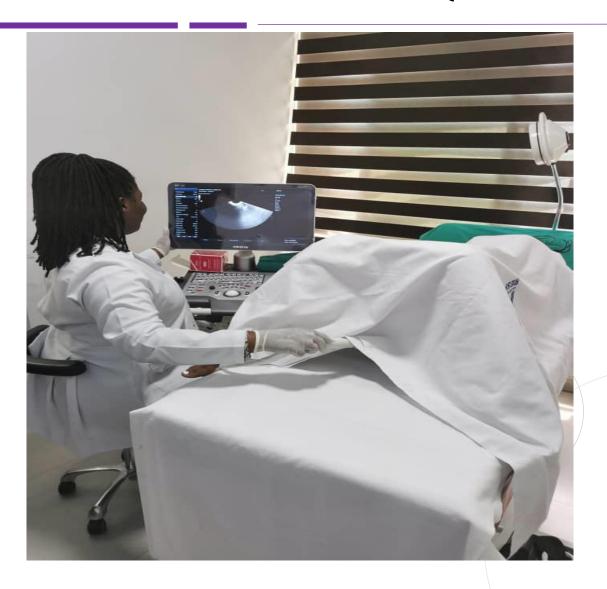




## **During ET**



### **ULTRASOUND TECHNIQUE DURING RAT IN IVF**





### **Summary**

- Trans vaginal ultrasound scan is mandatory for ladies during IVF treatments.
- Monitoring of follicle development in the ovaries and track stages of growth prior to extraction is necessary.
- Viewing inside the ovaries to help withdraw follicles/eggs for later implantation is necessary.
- Trans abdominal guided procedure during IVF embryo transfer is mandatory.



#### REFERENCES.

- ❖ Infertility and ultrasound for practicing gynecologist by Sonal Panchal.
- ❖ Infertility and gynecology 2<sup>nd</sup> edition by Sonal Panchal and Chaitanya Nagori.
- Remohil et al 2017.
- ❖ Ultrasound Imaging in Reproductive Medicine by Laurel A Stadtmauer, Ilan Tur-Kaspa 2<sup>nd</sup> edition.
- Trans vaginal sonography 3<sup>rd</sup> edition by Asim Kurjak. Jose Baje Arenas.



## THANK YOU



info@kairukiivf.org



www.kairukiivf.org