



# Benefits of using ultrasound in a Rural GP Practice

General Health and Primary Care  
Women's Health

Using an **ultrasound machine** in a **rural** general practice **setting** offers a range of :

\* *Clinical*

\* *Practical and*

\* *Economic*

**benefits** for both **patients** and **practitioners**.

**Today I Will be covering the following points :**

- **Improved Diagnostic Capability**
- **Quicker Access and Reduced Delays**
- **Cost-Effectiveness**
- **Enhanced Patient Care and Satisfaction**
- **Professional Development and Retention**
- **Versatility of Applications**
- **Challenges to consider**

# **Improved Diagnostic Capability**

## **1. Point-of-care diagnosis**

- Empowers general practitioners to promptly evaluate critical conditions including gallstones, early pregnancy viability, urinary retention, deep vein thrombosis (DVT), and abdominal aortic aneurysms.

## **2. Faster clinical decisions**

- Minimizes delays caused by reliance on imaging services from remote hospitals.
- Eliminates the waiting period for diagnostic imaging results from off-site facilities.
- Speeds up diagnosis and helps patients to get answers faster.

## **3. Improved accuracy**

- Enhances clinical assessment, particularly in cases of non-specific abdominal or musculoskeletal pain.
- Strengthens diagnostic accuracy when physical findings are inconclusive, especially in abdominal or musculoskeletal presentations.

# *Quicker Access and Reduced Delays*

## **1. Immediate imaging**

- Essential in settings where radiology access is delayed by days or even weeks.

## **2. Early detection**

- Enables earlier clinical intervention, which is critical for time-sensitive diagnoses like ectopic pregnancy.

## **3. Reduced patient travel**

- Eliminates the need for patients to travel long distances to access ultrasound imaging at regional centers.

# **Cost- Effectiveness**

## **1. Lower healthcare costs**

- Reduces unnecessary referrals and hospital admissions

## **2. Efficient use of resources**

- Useful in practices that don't have full access to advanced diagnostic equipment.

# **Enhanced Patient Care and Satisfaction**

## **1. Continuity of care**

- Supports continuity of care by ensuring that diagnostic investigations and treatment decisions take place within the patient's regular general practice setting.

## **2. Trust and reassurance**

- Enhances patient confidence through real-time and immediate feedback and results delivered by their regular healthcare provider.

## **3. Cultural**

- Culturally sensitive, particularly in communities where travel may be disruptive to family, work, or social obligations.

# **Professional Development and Retention**

## **1. Skill enhancement**

- Expands the GP's diagnostic toolkit and clinical confidence

## **2. Job satisfaction**

- Increases variety and scope of rural practice

## **3. Retention benefits**

- Clinicians are more likely to stay in rural areas

# *Versatility of Applications in Rural GP's*

## **1. Obstetrics**

- Confirming intrauterine pregnancy, fetal heart rate and dating.

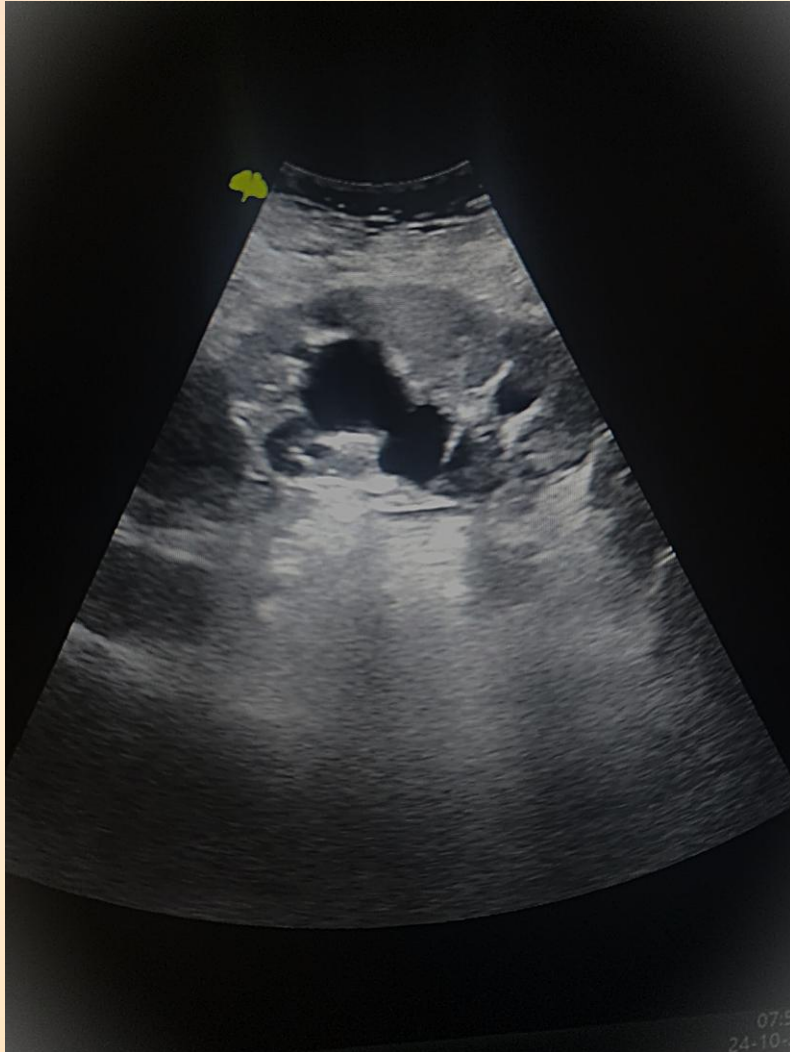
## *Intrauterine Pregnancy*



## **2. Abdomen**

- Gallbladder, kidneys, bladder and free fluid.

### ***Kidney Nephrosis***



Ultrasound done on E35 Vinno  
Ultrasound Machine

### ***Liver Metastasis***



# *Metastatic liver cancer*

Diagnosed in a 13-year-old boy.

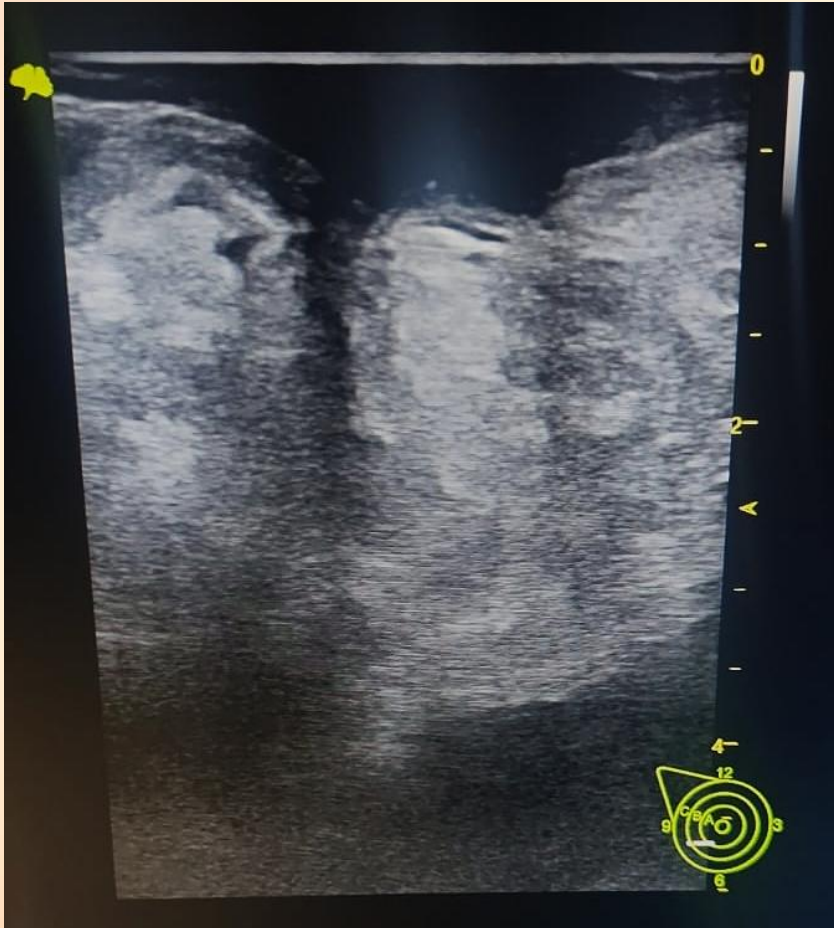
Ultrasound done on E35 Vinno  
Ultrasound Machine



### 3. Musculoskeletal

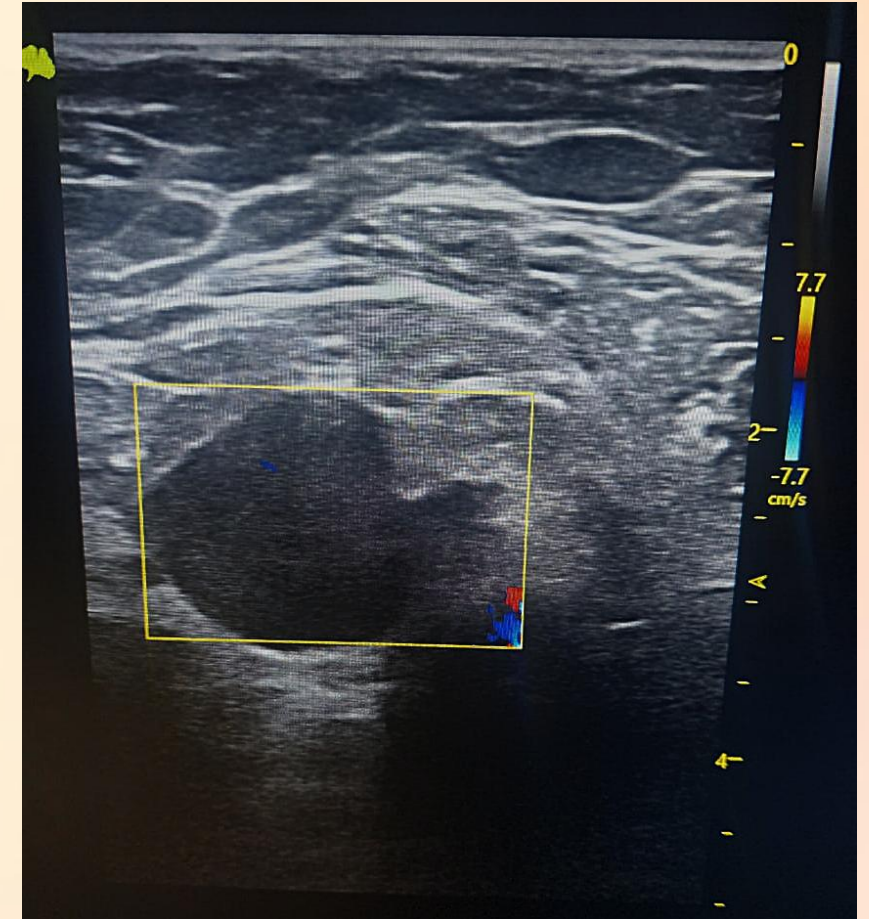
- Joint effusions, tendon injuries, skin, subcutaneous fat, muscles and ligaments.

*Necrotic tissue of breast Cellulitis*

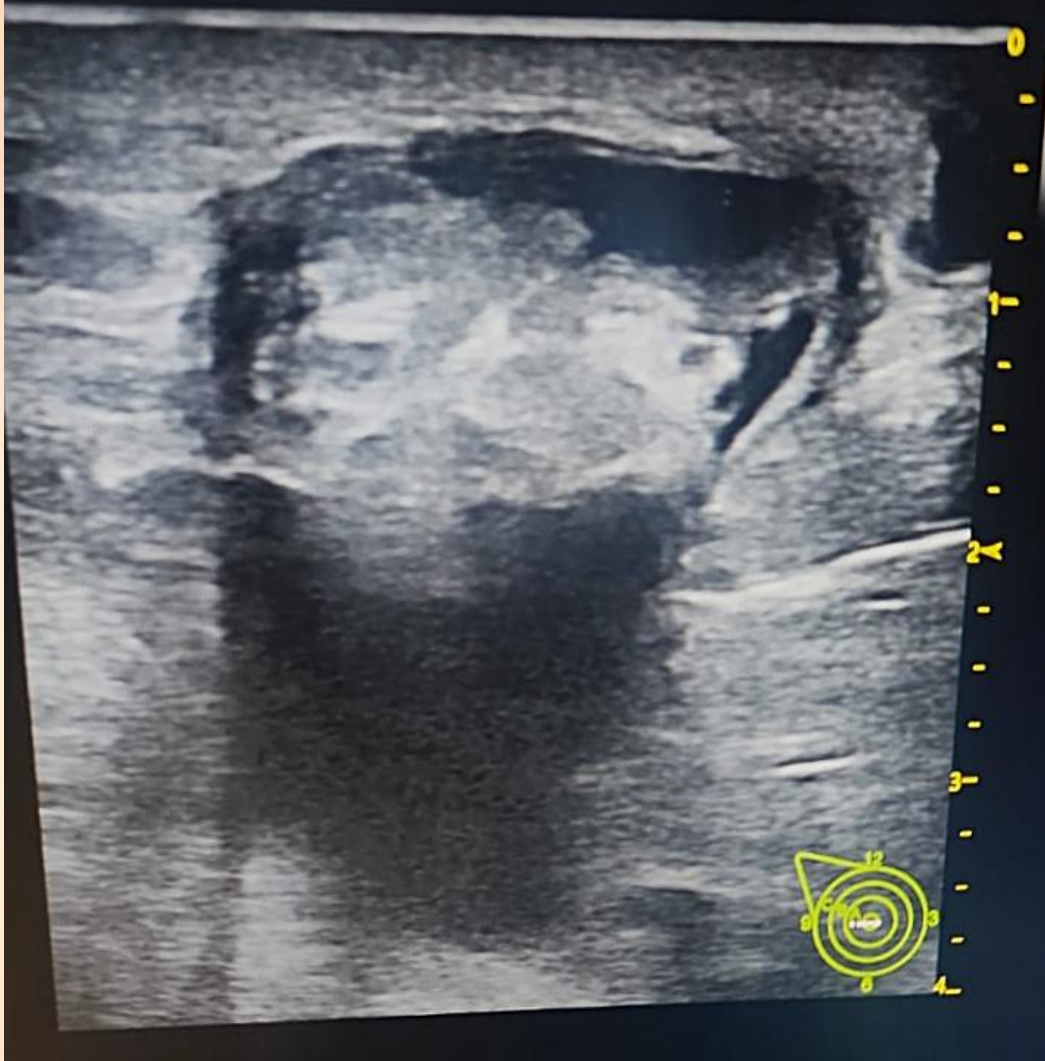


Ultrasound done on E35 Vinno  
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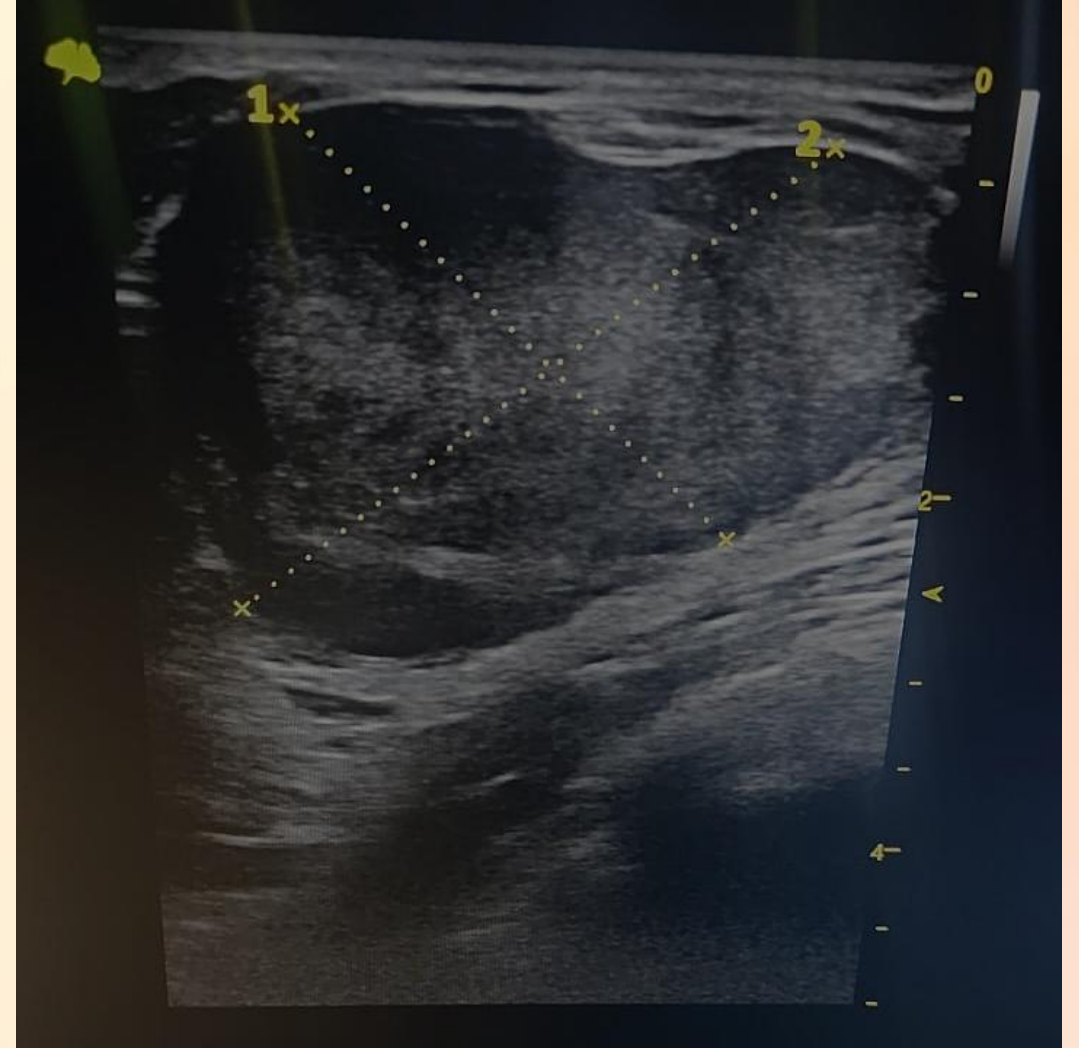
*Abnormal Breast Mass*



# *Breast Abscess*



# *Breast Hematoma*



Ultrasound done on E35 Vinno  
Ultrasound Machine

## 4. Cardiovascular

- DVT scanning, AAA screening, basic echocardiography

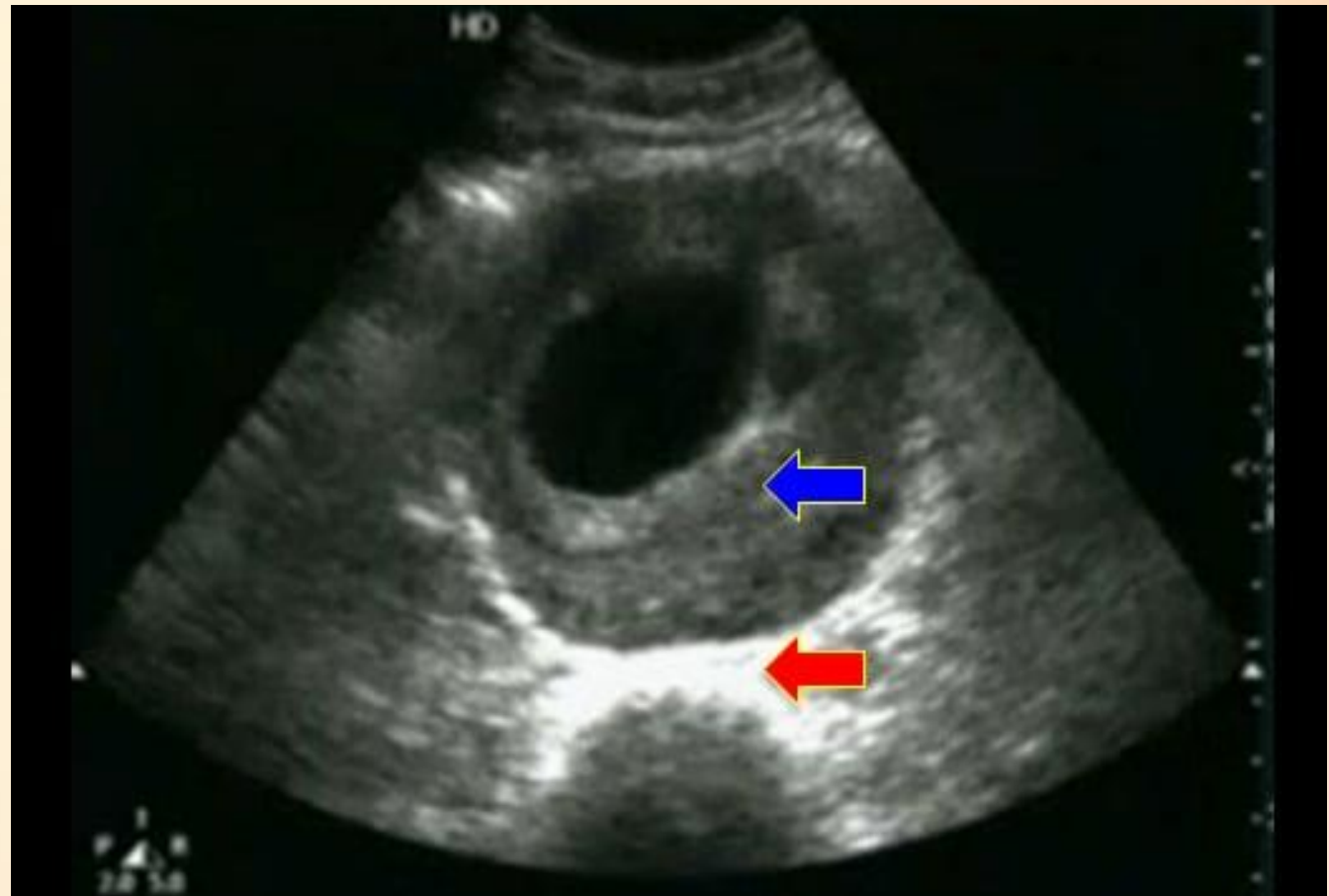
### DVT scanning:

An ultrasound to check for blood clots in the veins, commonly in the legs



## *AAA screening :*

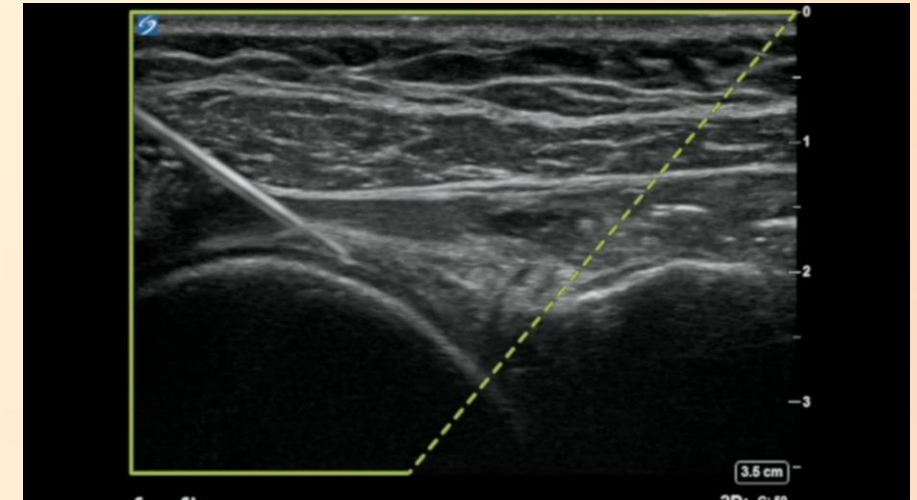
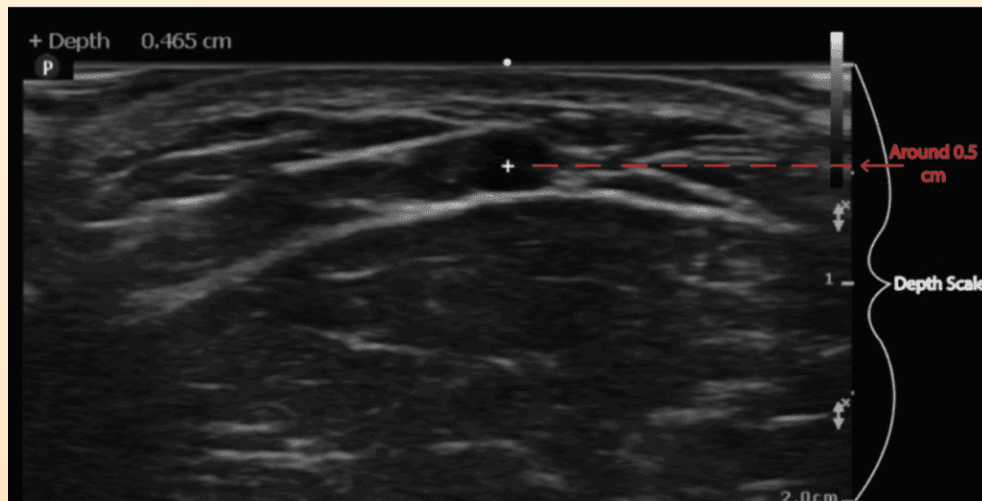
Screening for an abdominal aortic aneurysm, which is a bulge in the wall of the main artery in the abdomen.



## 5. Procedures

- Guiding injections, aspirations and venous access.

*Ultrasound-Guided  
Peripheral IV Insertion,  
Placement, and Access  
Made Easy*



*Ultrasound guided  
musculoskeletal  
injections*

## *Challenges to consider*

- Need for training and accreditation
- Maintenance of equipment and image quality
- Clinical governance – Ensuring appropriate use and documentation

**"Thank you, Impilo Medical Systems, for empowering my practice with the tools to provide immediate ultrasound diagnostics and timely treatment for my patients. Your support enables me to respond swiftly to my patients' needs and deliver high-quality care right here in my community."**

E35 Vinno Ultrasound Machine

