



# Vascular Visualization System ARTVIEW Product Presentation



# Mechanism of ARTVIEW

A device to visualize the radial Artery and the relatively deep veins in and around the radial artery

Image Adjustment buttons

Monitor

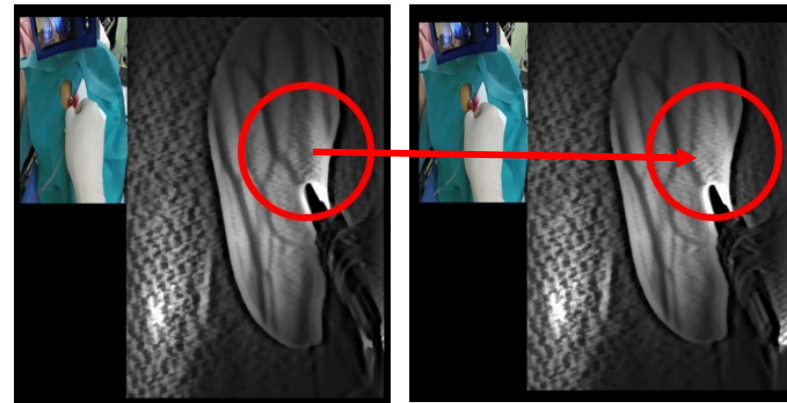
Camera

Near-infrared light (850nm) is emitted from under the wrist and The near-infrared light that passes through the wrist is captured and imaged by the upper camera. The areas absorbed by the hemoglobin in the blood are depicted in black. ◦

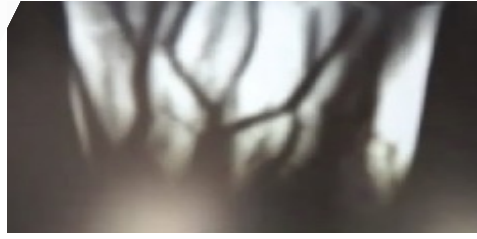
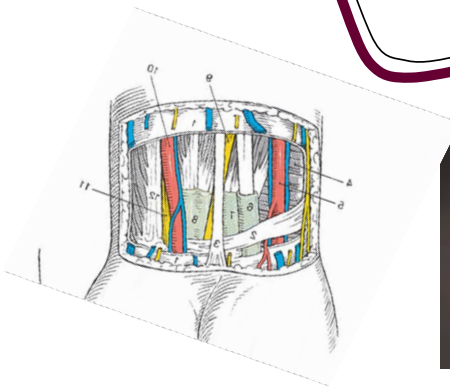
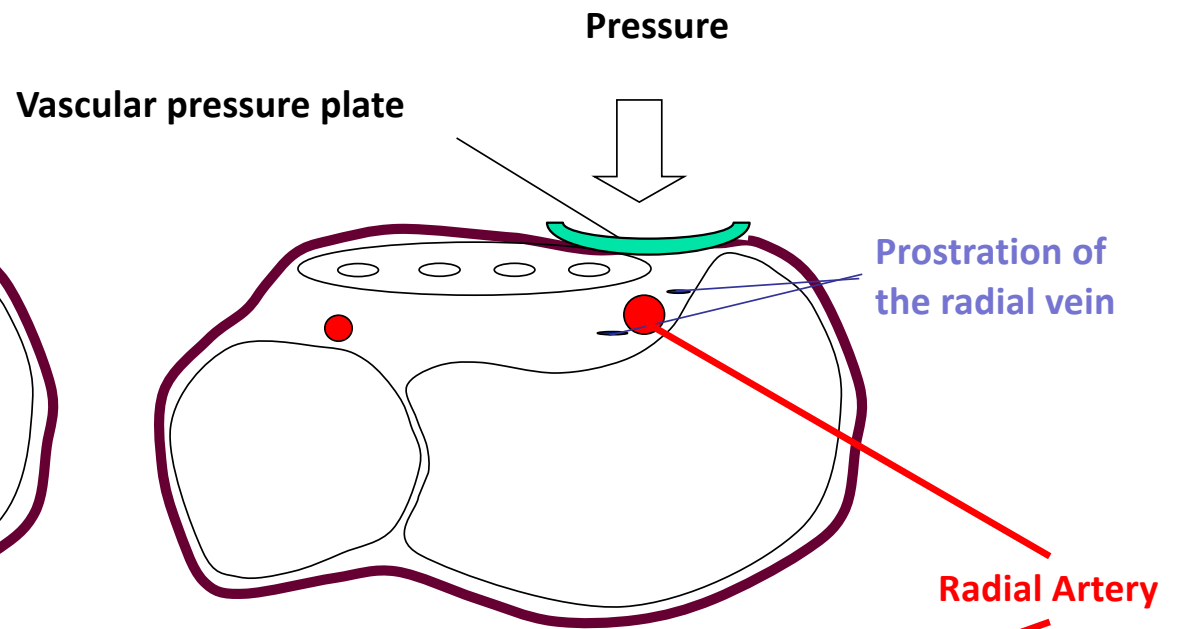
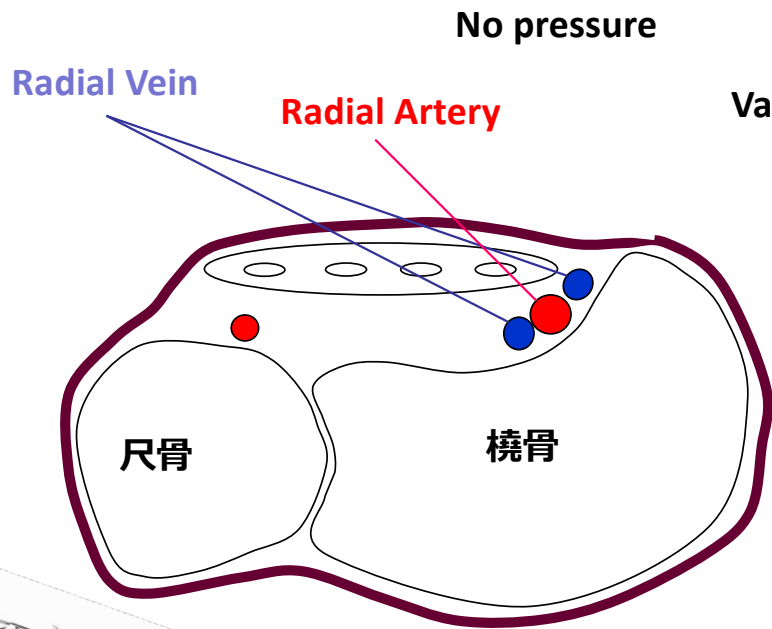
Areas where there is blood flow appear black

Erasing Blood Flow by Heparin Sodium Lock

Wrist Fix  
Near-infrared  
light source



# Dissection of the radial artery and visualization of the radial artery with a pressure plate

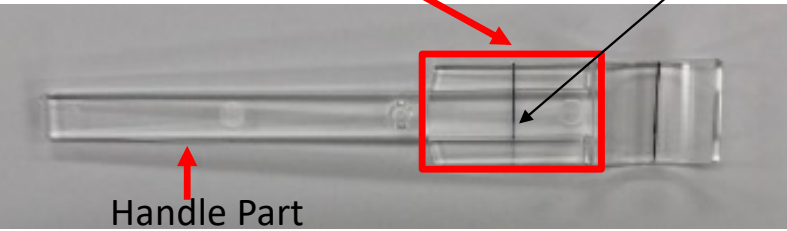


# How to use Vascular pressure plate (Vain-Press)

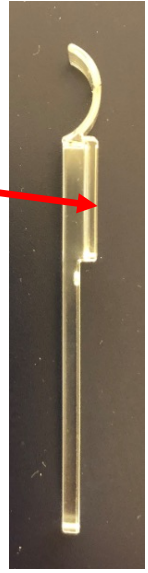
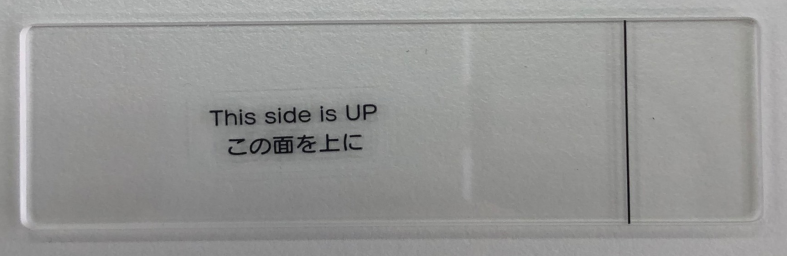
Important : Black Line

Pressure part for Radial Artery (Plane)

<Type I>



<Type II>



Left hand :  
Vain Press

Right Hand :  
Puncture needle



## How to identify the main **Artery** and **Vein** on display

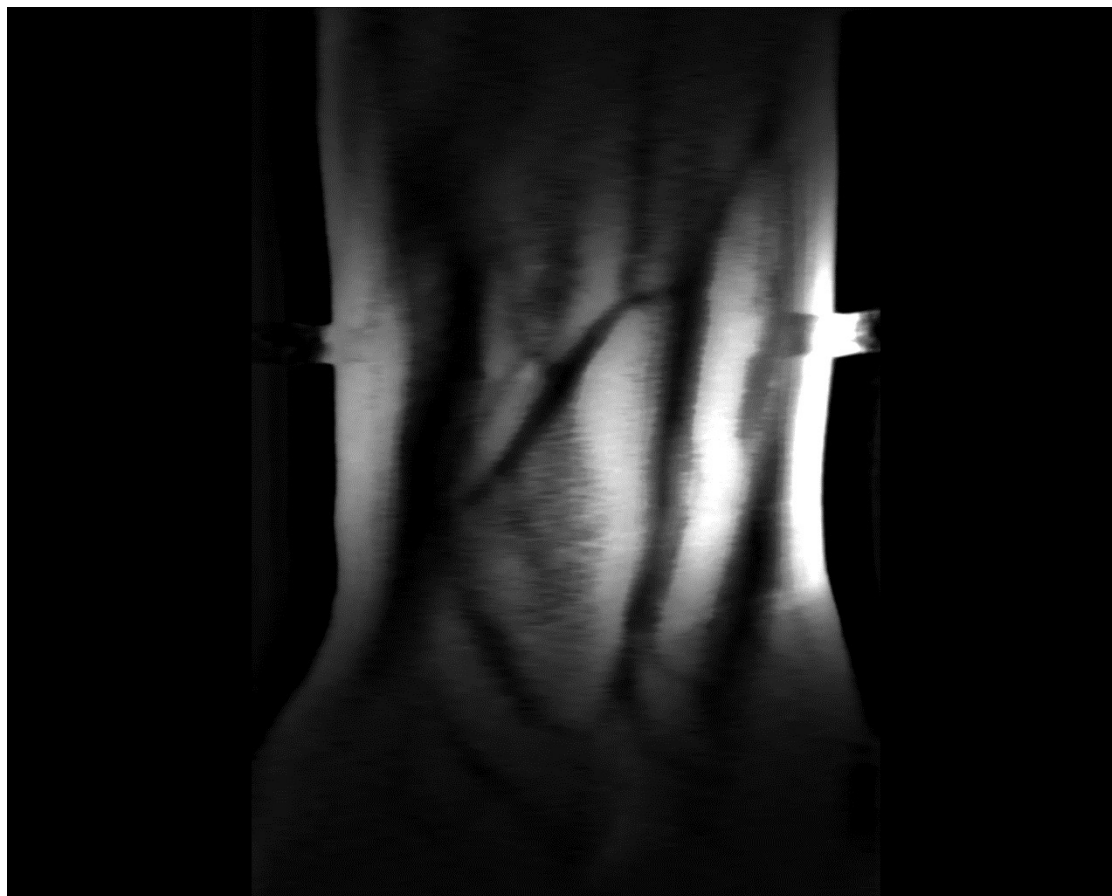
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- ① The beating is seen in the **Artery**.
  
- ② When the skin is pulled horizontally, it is the **Artery** that is difficult to move
  
- ③ When the skin is pressed, it is the **Vein** that is easy to disappear  
( Vein has less than one-tenth the internal pressure of artery. )
  
- ④ When the skin is pulled, it is the **Vein** that is easy to move with the skin  
( Because of its shallow location on the skin )



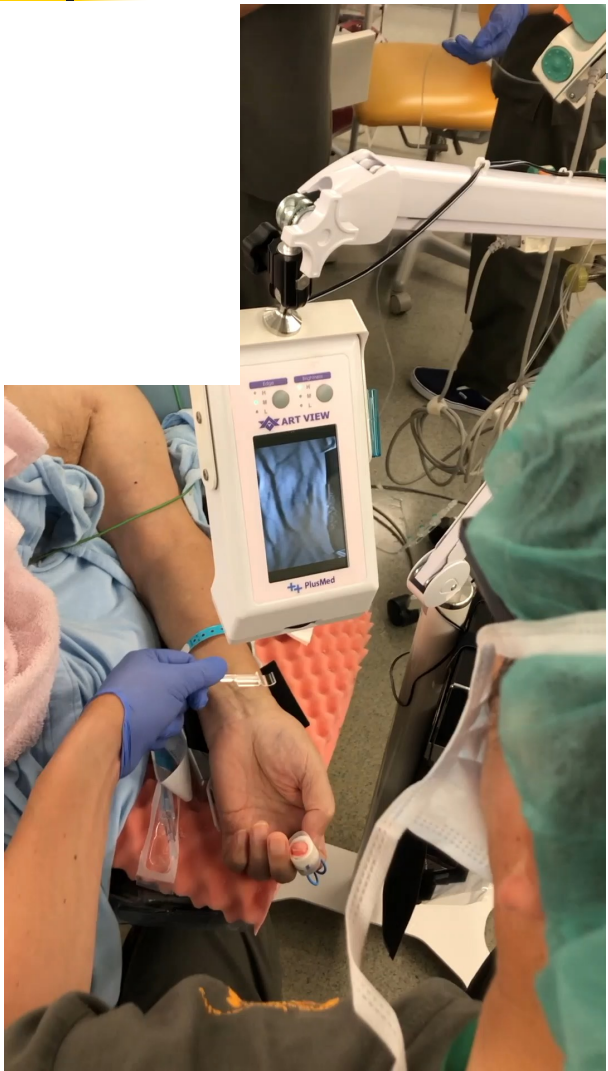
An example of how to identify **Artery** and Vein

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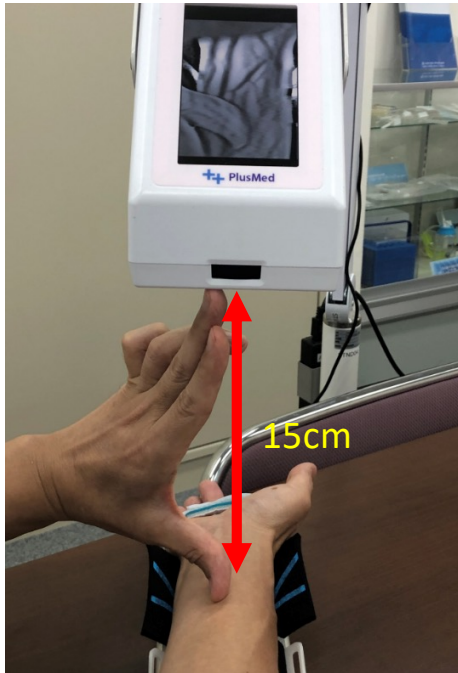


Examples of clinical use in the operating room



There are two points to note when setting up the device.

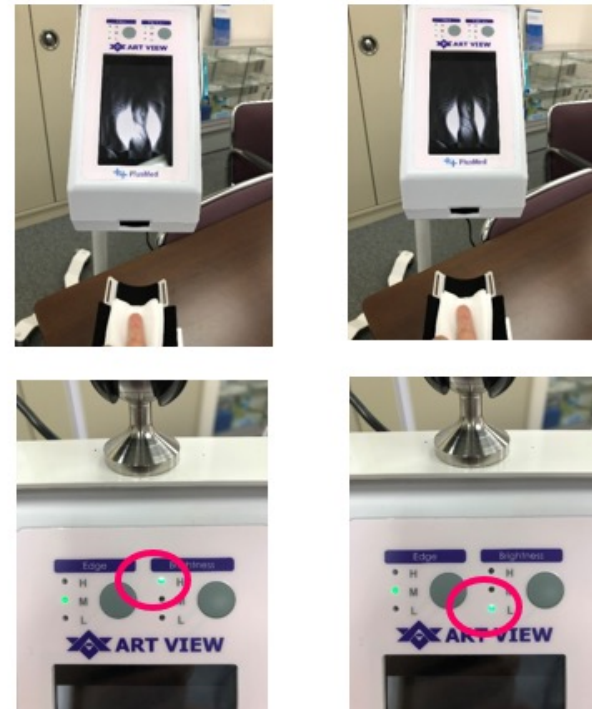
### Setting height



The height from the wrist to the camera is about 15cm, and the black line is clearly visible (focus dial fixed to the left side at maximum)

### If the display is too bright

[1<sup>st</sup> step] Brightness right button from H to L

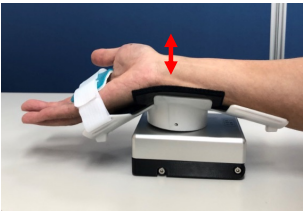




# Important points for drawing observation vessels (summary)

①

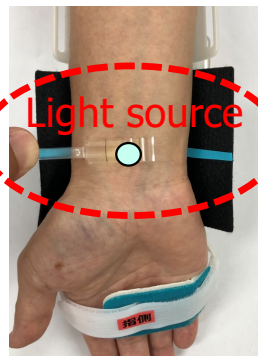
To prevent a gap between the wrist and the light source, place the wrist in a position where the fingers can be stopped by the belt, and fix the wrist in a position where the near-infrared rays can successfully penetrate the radial artery.



Since the center of the light source is on the blue line of the mat, the light source will be pressed along the blue line.

②

Locate the beating radial Artery and place a Vein-Press over it.

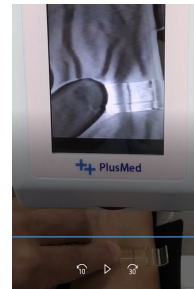


Light source

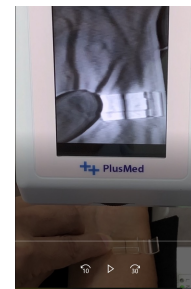
③

To find the beating of the artery. Strong pressure is required → Press hard enough to make everything glow white, and the first thing you'll see is a black, pulsating artery.

Arteries and Line



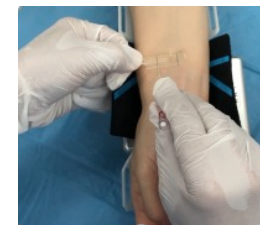
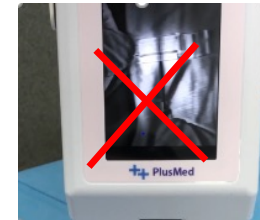
Overlapping



By reducing the artery diameter, can see the beating.

④

When puncturing, do not align the needle with the radial artery on the display. The needle should not be aligned with the radial artery. Straighten the needle with the black line of the Vein-Press on the hand side.



## A CASE OF DORSAL HAND VEIN SECURING AT 1 YEAR AND 9 MONTHS

Successfully secured the vein route in one puncture using a vascular visualization device

Difficult to identify veins by visual inspection and palpation





## Hospital departments to be promoted

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- Operating room => Securing radial artery line
- Pediatrics => To secure peripheral veins (mainly dorsal hand veins)
- ICU (Intensive Care Unit) => Securing radial artery line
- Cardiac catheterization room => Catheterization technique from radial artery
- \* Departments that perform radial artery puncture and venipuncture around the radial artery