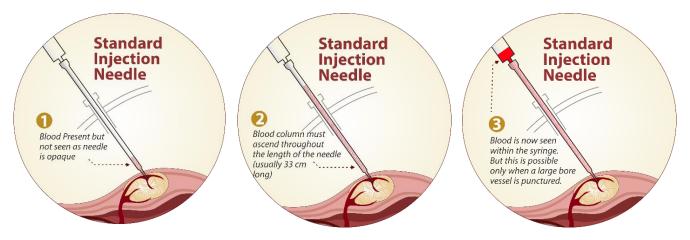
# PISAT'S VVIN® (Visual Vasopressor Injection Needle)

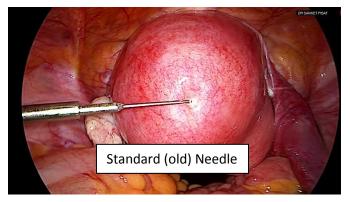
# www.pisatsvvin.com

A new invention for enhancing patient safety in laparoscopic myomectomy. A simple but unique innovation published internationally, protected with national and international patents and a registered trademark.

1. **The Problem :** The existing needles for vasopressin injection are about 30 cm long and opaque. Even on aspirating, it is almost impossible to see blood in the syringe unless a very large vessel is punctured

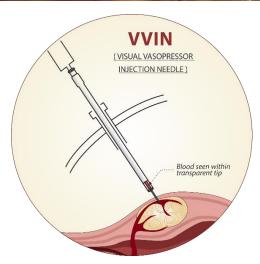


2. **The Solution:** Pisat's VVIN provides a transparent terminal portion (window) through which blood can be seen as soon as the needle punctures a blood vessel, at a volume as less as 0.03ml (less than single drop of blood). The needle can then be withdrawn, flushed, and repositioned at a new site.









## Instructions for Use:

- 1. Remove the VVIN from its packing that contains the metal body and stillette.
- 2. Remove the disposable needle tip (transparent) from the plastic box provided
- 3. Remove the stillette from the metal body
- 4. Screw the transparent tip on to the body
- 5. Insert the stillette into the assembled needle
- 6. With the stillette in place, push the needle through any standard 5mm port into the abdominal cavity, guided under laparoscopic vision. The stillette protects the needle tip during its passage through the port so that the flap valve within the cannula does not bend the needle tip, in case the needle is introduced forcibly through the 5mm cannula.
- 7. Withdraw the stillette
- 8. Flush the needle with diluted vasopressin solution to remove the air column within it
- 9. Pierce the myoma pseudocapsule and aspirate to check for blood within the transparent tip
- 10. If the aspirate is clear (not blood stained), inject the vasopressin solution
- 11. If the aspirate is blood stained, withdraw the needle and flush it with clear vasopressin- saline solution within the syringe. Re-insert the needle into another site over the myoma. Repeat this step till a clear aspirate is obtained.
- 12. Each site over the myoma has an equal chance of blood stained aspirate. Each time the needle is repositioned, or even turned at the same location, it is essential to aspirate and check for blood before injecting vasopressin. Even minor changes in the position of the needle tip while switching syringes may cause vascular puncture. To be sure, it is best to aspirate before EVERY SINGLE injection

#### Sterilization of the instrument

It is recommended to sterilize the instrument at your centre before using it the first time. The metal body and stillette can be autoclaved, sterilised by ETO or by using chemical sterilizing agents. The transparent tip is not autoclavable. It has to be sterilized by ETO or by using chemical sterilizing agents like cidex, perasafe, korsolex etc

#### Life of the instrument

The transparent tip is disposable and should ideally be disposed off after each case, using a new tip each time.

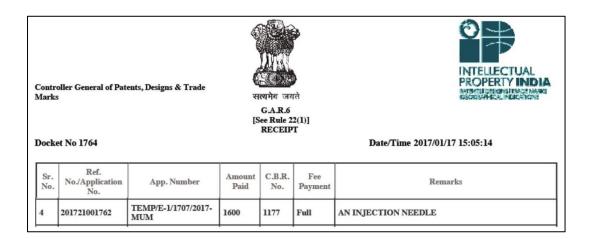
Though not recommended, the tip may be re-used for about 10 cases after sterilizing. The transparent tip is made of hard and durable polymer. However, bending forces exerted at the joint during insertion into the fibroid, or while screwing the tip on to the shaft may weaken the tip eventually. Hence, using it for more number of cases is strongly discouraged.

## **Publications:**

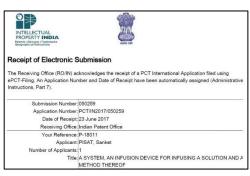
 Surgical Technology International Journal, USA: Pisat S, van Herendael B. Pisat's Visual Vasopressor Injection Needle: An Innovative Tool for Increasing Patient Safety in Laparoscopic Myomectomy. Surgical technology international. 2017 Mar 9;30.

PUBMED Citation: https://www.ncbi.nlm.nih.gov/labs/articles/28277598/

- 2. **Journal Of Obst & Gyn of India:** Pisat's Visual Vasopressor Injection Needle Pisat, S.V. J Obstet Gynecol India (2017). https://doi.org/10.1007/s13224-017-1048-6
- 3. **Official online journal of ISGE** (International Society Of Obst & Gyn) **www.TheTrocar.com** (https://www.thetrocar.com/index.php/instruments/46-scientific-appraisals/209-pisat-s-visual-vasopressor-injection-needle-vvin)
- 4. Official website of ISGE: https://www.isge.org/2017/04/pisats-visual-vasopressor-injection-needle/



# **Indian Patent Application**





International patent application

**Trademark application** 

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