



14th Annual Conference of Venous Association of India

In association with Asian Venous Forum

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Theme-How I Do It



Glue Closure: Live in box case

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Within the last two decades the treatment of incompetent truncal veins was revolutionized by the introduction of minimally invasive, endovenous thermal ablations techniques, which led to excellent long-term anatomical success rates.

- That is why we found it most interesting and relevant from a practical point of view to study the Russian developments of glue compositions and try to identify the most effective of them in order to implement in everyday phlebological practice
- In Russia alone over the past 10 years more than 30 cyanoacrylate medical formulas have been synthesized. At the same time, there has been no data on the possibility of using glue compositions for treatment of diseases of the main superficial veins.

- Having analyzed in detail all the Russian developments presented to date, we have come to the conclusion that the Sulfacrylate adhesive compound, (Patent No. RU (11) 2156140 (13) C1, **20.09.2000**), can be used as a potential occlusant for non-thermal obliteration of varicose veins.

- **The Russian adhesive Sulfacrylate was synthesized in 2000, in contrast to foreign analogues it is based on**
- **ethyl ether of α -cyanoacrylic acid, not butyl.**
- **n-butyl cyanoacrylate (VenaSeal and VenaBlock)**
- **Two additional plasticizers were added to the glue, which reduced the brittleness of the compound, while reducing the inflammatory reaction due to an additional substance.**
- **In 2010 it was registered and approved for use in**

Developed in Russia Sulfacrylate glue has even lower viscosity and higher fluidity, approaching the water fluidity, or more precisely 'thin syrup' quality

- At first glance, in connection with these qualities one should have expected even greater polymerization capacity of the Russian glue and potentially reduced adhesiveness with the possibility of more prolonged advancement into the deep vein system causing potential embolization

However, the fundamentally new formula of Sulfacrylate – α -cyanoacrylic acid diethyl ether, which includes two additional plasticizers to reduce brittleness of the extraction, and an additional substance to increase adhesiveness of the glue composition, – enabled to avoid the potential complications

- While following the glue injection technique, we did not observe the problem of glue settling in the delivery system
- Extremely high adhesive properties of the glue together with its low viscosity and elasticity allowed avoiding problems with the possible advancement of glue into the deep vein system

Conclusion

- Cyanoacrylate adhesive embolization of incompetent truncal veins using the Russian glue Cyanoacrylate is a safe and effective procedure
- The high adhesive ability of the glue contributes to the absence of extension into the deep system
- The glue is biodegradable
- The Russian glue is a low-cost treatment which can easily be performed as an office-based procedure



Veno GlueRus