

A MEDISYSTEMS EXCLUSIVE!

SAFER & EASIER CANNULATION



ButtonHole[®]

AVF Needle Sets - Anti-Stick For You,
Reduced Pain For Your Patients

 **MEDISYSTEMS**
THE SAFE CHOICE.....FOR OVER 25 YEARS

ButtonHole[®] Needle Sets with Anti-Stick Dull Bevel

Needle Sets for Constant-Site AV Fistula Access

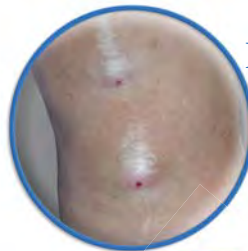
Safer and Easier Cannulation with the Constant-Site Cannulation Technique.

For more than 25 years the constant-site cannulation technique has been used worldwide to access native AV fistulae for hemodialysis. Clinical experience demonstrates that the

incidence of pain, hematoma, infection and infiltrations during cannulation can be reduced by utilizing the constant-site technique.



Anti-stick dull bevel



Repeated Cannulation of the Same Site



Easily Identified by Green Clamp



Excellent Option for the Home or Self-Care Patient



Now, part of LifeStream[™] - Your Complete Guide to Access Preservation

Suggested Readings:

1. Kronung, G., et. al.; Plastic Deformation of Cimino Fistula by Repeated Puncture; Dialysis and Transplantation, Vol. 13, No. 10, October 1984.
2. Lindley, E.; Vascular Access Management Among Research Projects by the EDTNA; Nephrology News and Issues: 51-54, August 1999.
3. Ouwendyk, M.; Blood Access for Nocturnal Hemodialysis; Outline from Presentation at 5th International Symposium on Home Hemodialysis, March 2, 1999.
4. Scribner, B.H.; The Overriding Importance of Vascular Access; Dialysis and Transplantation, Vol. 13, No. 10, October 1984.
5. Scribner, B.H.; Circulatory Access- Still a Major Concern; Proceedings of EDTA, Vol. 19, 1982.
6. Twardowski, Z.; Constant Site (Buttonhole) Method of Needle Insertion for Hemodialysis; Dialysis and Transplantation, Vol. 24, No. 10, October 1995.
7. Twardowski, Z., Harper, G.; Buttonhole Method of Needle Insertion into Arteriovenous Fistulas; Presentation Transcripts from 3rd International Symposium on Daily Home Hemodialysis, February 17, 1997.
8. Twardowski, Z., Harper, G.; The "Buttonhole" Method of Needle Insertion Takes Center Stage in the Attempt to Revive Daily Home Hemodialysis; Contemporary Dialysis and Nephrology, February 1997.
9. Twardowski, Z., Kubara, H.; Different Sites vs. Constant Sites of Needle Insertion into Arteriovenous Fistulas for Treatment by Repeated Dialysis; Dialysis and Transplantation, Vol. 8, No. 10, October 1979.
10. Williams, M.; Frequently Asked Questions about Nocturnal Home Hemodialysis; <http://www.renalweb.com/guest/lit/mwilliams/FAQs.htm>.

Medisystems ButtonHole[®] Benefits

- The ButtonHole AV fistula needle helps prevent cutting of the tissue surrounding the established scar tissue tunnel track.¹
- The scar tissue tunnel helps make cannulation less painful.^{2,3}
- Use of ButtonHole needle sets helps reduce the risk of thrombosis⁴, as well as missed sticks³, infiltrations and hematomas¹.
- The constant-site technique is an excellent option for the home or self-care patient³ as it helps overcome cannulation anxiety⁵.
- The constant-site technique is associated with rapid post-dialysis hemostasis².
- The ButtonHole AV fistula needle prevents the risk of accidental needlesticks⁶.
- Constant site cannulation using ButtonHole technique is known to play a key role in successful implementation of the Fistula First initiative⁷.
- Dull needles comply with OSHA's revised Bloodborne Pathogen Standard

Constant-Site Technique

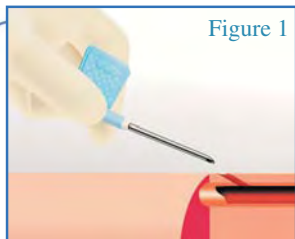


Figure 1

Following routine skin disinfection, enter the established access site using the Medisystems ButtonHole AV fistula needle as shown in fig. 1.

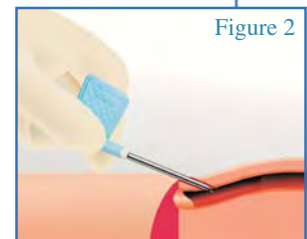


Figure 2

Advance the ButtonHole AV fistula needle into the scar tissue tunnel track as indicated in fig. 2.

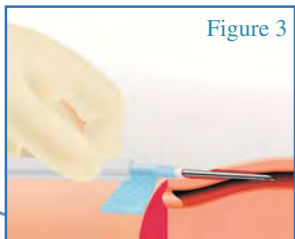


Figure 3

When a flashback of blood is seen, lower the insertion angle of the ButtonHole AV fistula needle and advance it into the fistula as shown in fig. 3. Tape the ButtonHole AV fistula needle per facility protocol.

References:

¹ Meriam Jayoma RN, Elizabeth Petershofer RN, Stephen MacLeod RN, Vicki Margaret Huybers RN DiPierdomenico RN, Wyn Ngo RN, Joyce Hunter RN, Rosa M. Marticorena RN, Marc B. Goldstein MD; *Application of a Modified ButtonHole Technique by Multiple Cannulators in Troubled Fistulas*; presented in the Access Workshop at ADC 2003.

² Rosa M. Marticorena, Joyce Hunter, Stephen MacLeod, Elizabeth Petershofer, Niki Dacouris, Sandra Donnelly, Marc B. Goldstein; *The salvage of aneurysmal fistulae utilizing a modified buttonhole cannulation technique and multiple cannulators*; Hemodialysis International 2006; 10:193-200

³ Patty H K Tsang; *Buttonhole cannulation technique vs conventional cannulation technique*; Renal Society of Australasia Journal // July 2006 Vol 2 No: 2, Pg. 25

⁴ Clinical data on file.

⁵ Paula McLeister, Jane Handsley, Louise MacLeod, Deborah Gray-MacDonald; *Constant Site Cannulation for Incentre Haemodialysis Patients*; Renal Society of Australasia Annual Scientific Conference Abstract Number: 0116 Pg. 29

⁶ Clinical data on file.

⁷ 2006 Fistula First Quality Award Winners; http://www.therenalnetwork.org/images/2006_FFQualityAwards.pdf

ButtonHole® Sets For Every Indication

16" Tubing ButtonHole Sets

Provides the easy, one-handed ergonomics needed by self-cannulators. Ideal for upper-arm fistulae.

3/5" Cannula ButtonHole Sets

Short 3/5" cannula is less invasive for pediatric, shallow or immature fistulae. Also useful where a lower-pressure drop, high blood flow access device is needed.

Gauge	Length	12" Tubing (250 each/case)	16" Tubing NEW (250 each/case)	12" Tubing Single Needle (300 each/case)	12" Tubing Rotating Hub (500 each/case)
14	1"	BH-7004*	--	--	--
14	1 1/4"	BH-7014*	--	--	--
15	3/5"	BH-7035	--	--	--
15	1"	BH-7005	BH-7605	BH-3005	BH-4005E
15	1 1/4"	BH-7015	BH-7615	--	--
16	3/5"	BH-7036	--	--	--
16	1"	BH-7006	BH-7606	BH-3006	BH-4006E
16	1 1/4"	BH-7016	BH-7616	--	--
17	3/5"	BH-7037	--	--	--
17	1"	BH-7007	--	--	--

*Pending release in Q1 - 2007

**Only Medisystems provides nationwide clinical support and education.
No other manufacturer of AVF needles compares to us.**

Contact us for more information on:

- Constant-Site Technique
- Benefits to Patient and Staff Using this Technique
- In-Service and Educational Videos/DVD's
- Interactive "Tele-Training" Sessions
- "Train-the-Trainer" Programs
- Laminated Procedure Cards



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Questions or Comments:

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