CRITICAL CARE

MONITORING & CRITICAL ACCESS

Arterial access

PRODUCT GUIDE

VYGON

Value Life

The success of the Seldinger technique for arterial access

Arterial lines are routinely used in the critical care environment for haemodynamic monitoring as well as blood sampling for physiological monitoring in patients at risk of deterioration

Whilst widely recognised to be a safe device, knowledge of anatomy, procedural skills and awareness of safety issues are vital to reduce the risk of harm to both patient and operator. Some high profile episodes of harm in recent years[1] have increased awareness of the patient and operator safety and calls for a national safety standard.[2]

When it comes to the insertion of arterial lines into small vessels, the procedure can be technically challenging, particularly if the patient is hypotensive or peripherally vasoconstricted. Using the Seldinger technique adds the reliability of a confirmed arterial puncture prior to advancing the catheter into the vessel. In practice, studies have shown the Seldinger technique has demonstrated a significantly higher rate of success than the direct threading method.[3]

> My technique was the result of an idea...Vygon developed that idea with skill and innovation, resulting in an excellent product which I highly recommend.
>
> **Sven-Ivar Seldinger**

leadercath®

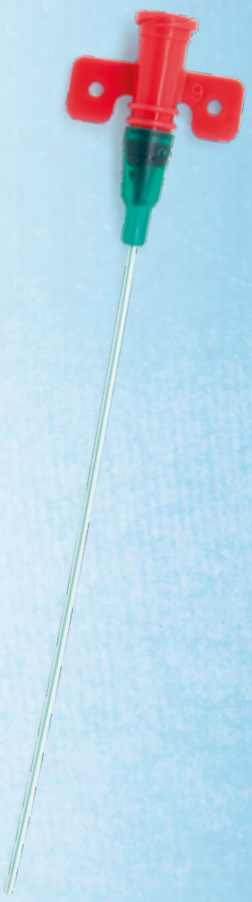
Provides arterial puncture

leadercath arterial offers the 'classic' Seldinger technique plus a host of benefits dedicated to patient safety and ease of use.

- Inserted using the classic Seldinger technique for a higher success rate
- Anti-kink collar maintaining patency
- Winged hub for secure fixation
- Red hub for easy identification
- Soft tipped guidewire for easy insertion.

Matching Michigan introduced technical interventions to reduce line bloodstream infections which involved maximal sterile precautions including full-barrier drapes.[4]

Arterial Packs can minimise arterial catheter-related bloodstream infections. Epic3 guidelines recommend the use of maximal sterile barrier precautions for the insertion of central venous access devices (Class C). Reduced rates of infection will deliver health gains for patients and benefits for health systems.[5]



Arterial insertion packs

Setting the standard for arterial line placement

Packs designed to meet current guidelines, clinical and patient needs. Packs available with a safety hypodermic needle to reduce the risk of needlestick injuries & available with a choice of dressing to suit local protocols and clinical needs.

Our standard arterial pack includes:

- 1 x arterial catheter
- 1 x outer wrap 75x50cm
- 1 x arterial peelable drape 50x100cm (fenestrated 5.5x7cm)
- 1 x hypodermic needle 25G 5/8" orange (safety option available)
- 1 x 2.5ml LS syringe
- 1 x 5ml LS syringe
- 5 x swabs 10x10cm, 4 ply, non-woven
- 1 x dressing (Tegaderm / IV3000)

The benefits of our arterial packs

Cost saving
Substantial saving when purchasing a pack vs individual components

Clinical benefit
Endorses Aseptic Non Touch Technique (ANTT) to minimise infections

Patient benefit
Reduces rates of infection which will deliver health gains

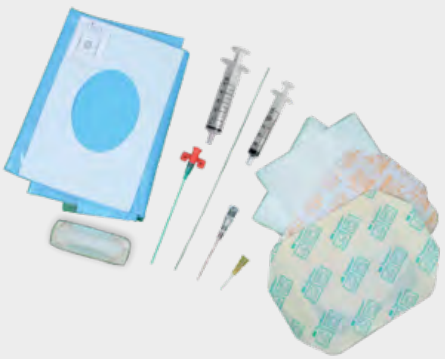
Clinician benefit
Includes a heat-sealed drape and a safety hypodermic needle (designed to minimise the risk of accidental needlestick injuries)

Efficiency and simplicity
Standardising the clinical practice by purchasing all the components/equipment required to complete your procedures resulting in less wastage from the multiple packaging of individual components.

VYSET CUSTOM PACK

A VYSET custom pack allows you to create a high quality pack to match your local protocol, incorporating all the items you need

- Sharp safety devices
- Pre-filled saline syringes
- Trust specific customised documentation
- US gel & probe cover



Includes a heat-sealed drape

- Provides a barrier against infection
- Placed around the patient's cannulation site with ultra-high absorbency
- Provides an optimum sterile field for arterial catheterisation
- Reduces displacement as it can be peeled.

arteriosel®

Gives you more time to place the catheter under less pressure

Incorporating our leadercath® arterial catheter, arteriosel utilises the benefits of the Seldinger technique for arterial cannulation. In addition, the device delivers minimal blood loss and clear visualisation of vessel access.

Minimal blood loss means minimal exposure to blood for clinicians therefore reducing potential exposure to blood borne viruses.

Features of arteriosel include:

1. **Funnelled hub**
   Ensures smooth transition of the guidewire
2. **Blood control valve**
   Reduces blood loss and minimises risk of blood exposure to clinicians
3. **Visualisation chamber**
   Blood pulsating in a contained extension tube is confirmation you have positioned the catheter in the artery even in hypotensive patients. In addition the visualisation chamber is calibrated to let you see pulsating blood, for blood pressures from 30mmHg – 260mmHg.
4. **Rotating chamber**
   Allows you to reposition the needle bevel so the visualisation chamber does not affect line of sight.

Ordering codes

Leader**cath &** Arterio**Sel catheters**

Vygon code	NHSSC code	Description	Length (cm)	Size (G)	Quantity (Box)
000115090	FSQ049	leader**cath®** arterial PE	8	20	20
00011511	FSQ004	leader**cath** arterial PE	10	18	20
0001150901	FSQ1324	Arteriosel catheter	8	20	20

Arterial insertion packs

Vygon code	NHSSC code	Description	Length (cm)	Size (G)	Quantity (Box)
000115802	FSQ1777	Arterial pack with Tegaderm dressing	8	20	35
000115803	FSU472	Arterial pack with IV3000 dressing	8	20	40
V02770120	FSQ2334	Arterial pack with safety hypodermic needle (Tegaderm)	8	20	35
V02770121	FSQ2335	Arterial Pack with safety hypodermic needle (IV3000)	8	20	40
000115821		ArterioSel pack with Tegaderm dressing	8	20	20

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References

1 Leslie R A et al. Survey of Arterial Line Practice Anaesthesia 2013; 68: 1114-1119

2 Blackburn J, Walton B, Risks Associated With Arterial Lines; Time for a National Safety Standard? Journal of Anaesthesia Practice, November 2016

3 Beards, S C et al. A comparison of arterial lines and insertion techniques in critically ill patients

4 BMJ Qual Saf. 'Matching Michigan': a 2-year stepped interventional programme to minimise central venous catheter-blood stream infections in intensive care units in England. 2012

5 The Journal of Hospital Infection. IVAD13 Epic3. Jan 2014.

FOR FURTHER INFORMATION, PLEASE CONTACT: **info@vygon.co.uk**

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