



Dipartimento Integrato Interistituzionale
DIPINT



Primo Workshop

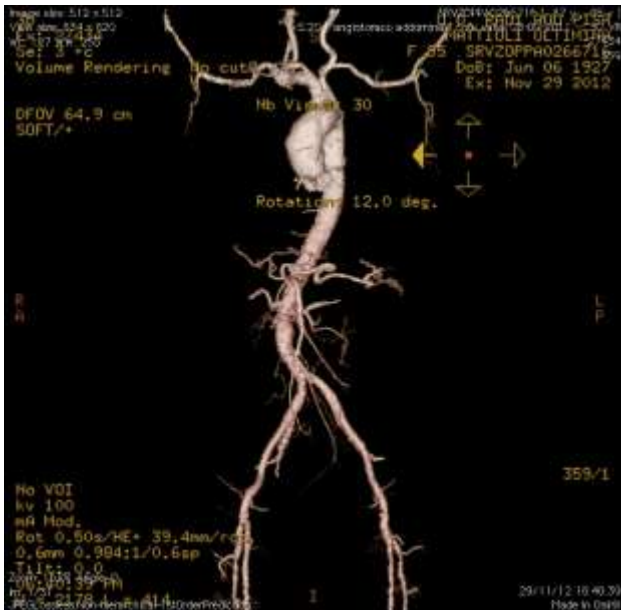
Clinical Research and Innovation

Venerdì 4 luglio 2014 9.00 - 19.00
Aula Magna - Polo Fibonacci - Largo Pontecorvo 3, Pisa

Alternative Vascular Approches in Interventional Cardiology

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TAVI TRANSFEMORAL APPROACH

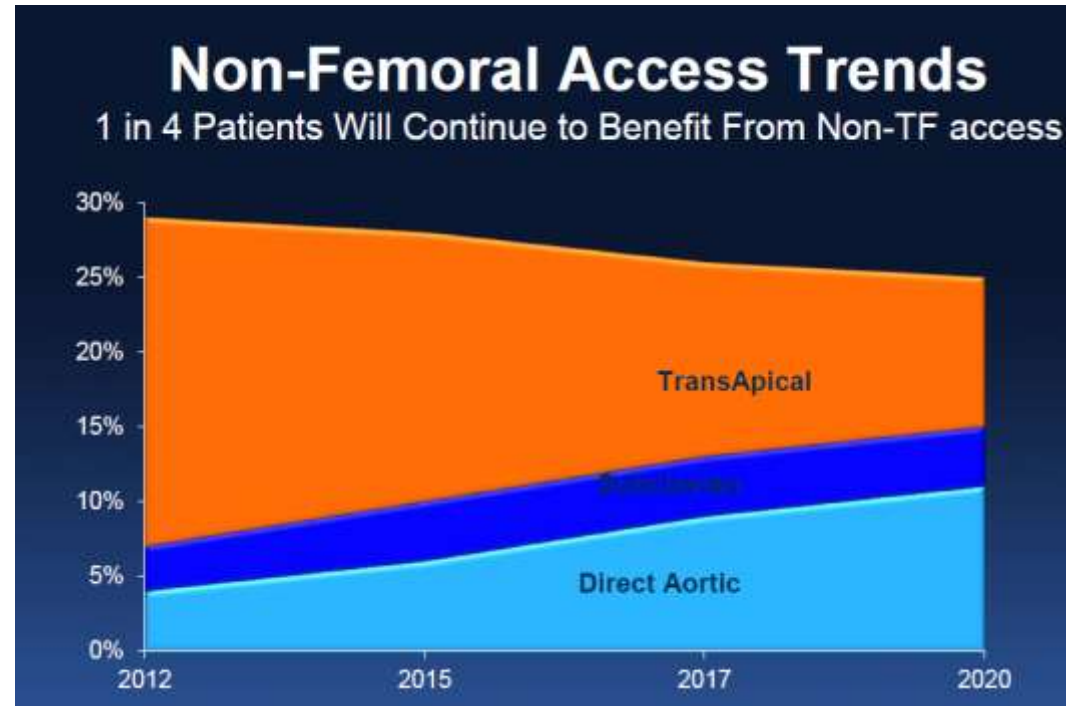
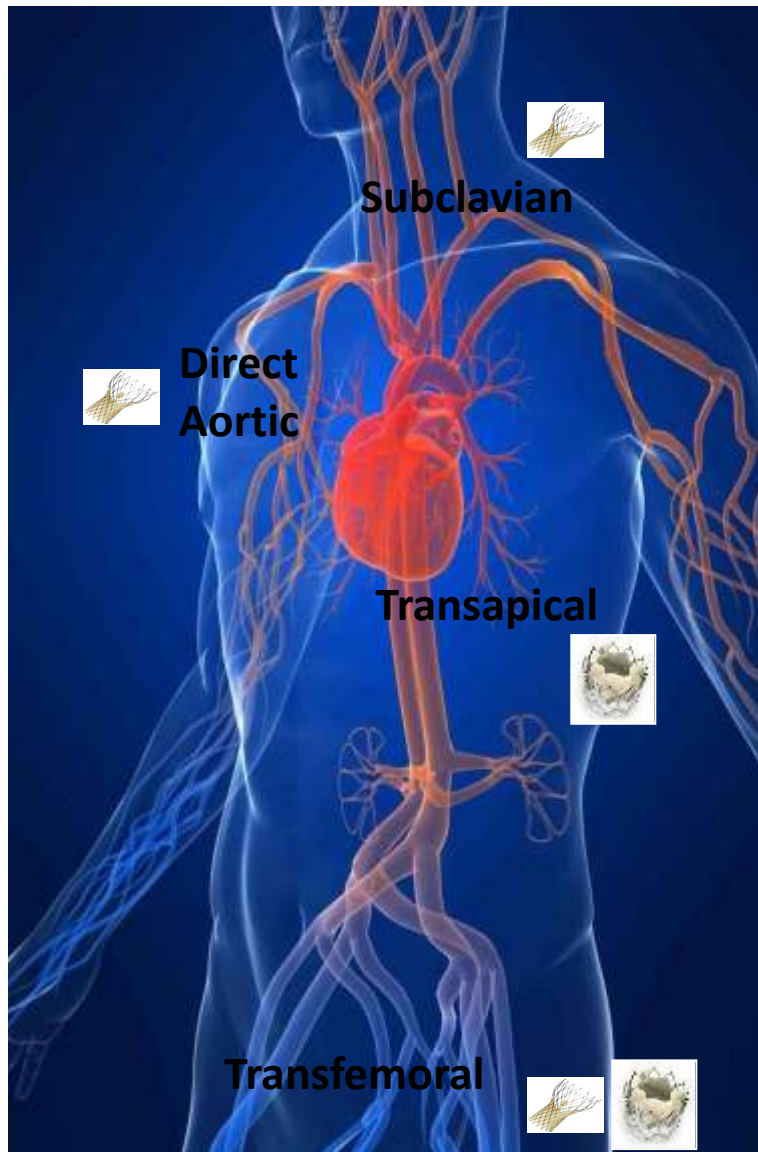


Peripheral artery disease?



	Total patients N	Peripheral artery disease N (%)
PARTNER ¹⁴ (ES)	348	148/344 (43.0)
Italian registry ¹⁵ (CV)	663	127 (19.2)
SOURCE registry ³³ (ES)	1,038	208 (20.0)
French registry ⁶ (ES/CV)	3,195	643/3,093 (20.8)
German registry ¹⁹ (ES/CV)	1,315	330/1,315 (25.1)
Pilot European Sentinel TAVI registry ²⁵ (ES/CV)	4,571	671/2,707 (24.8)

Increase in alternative access

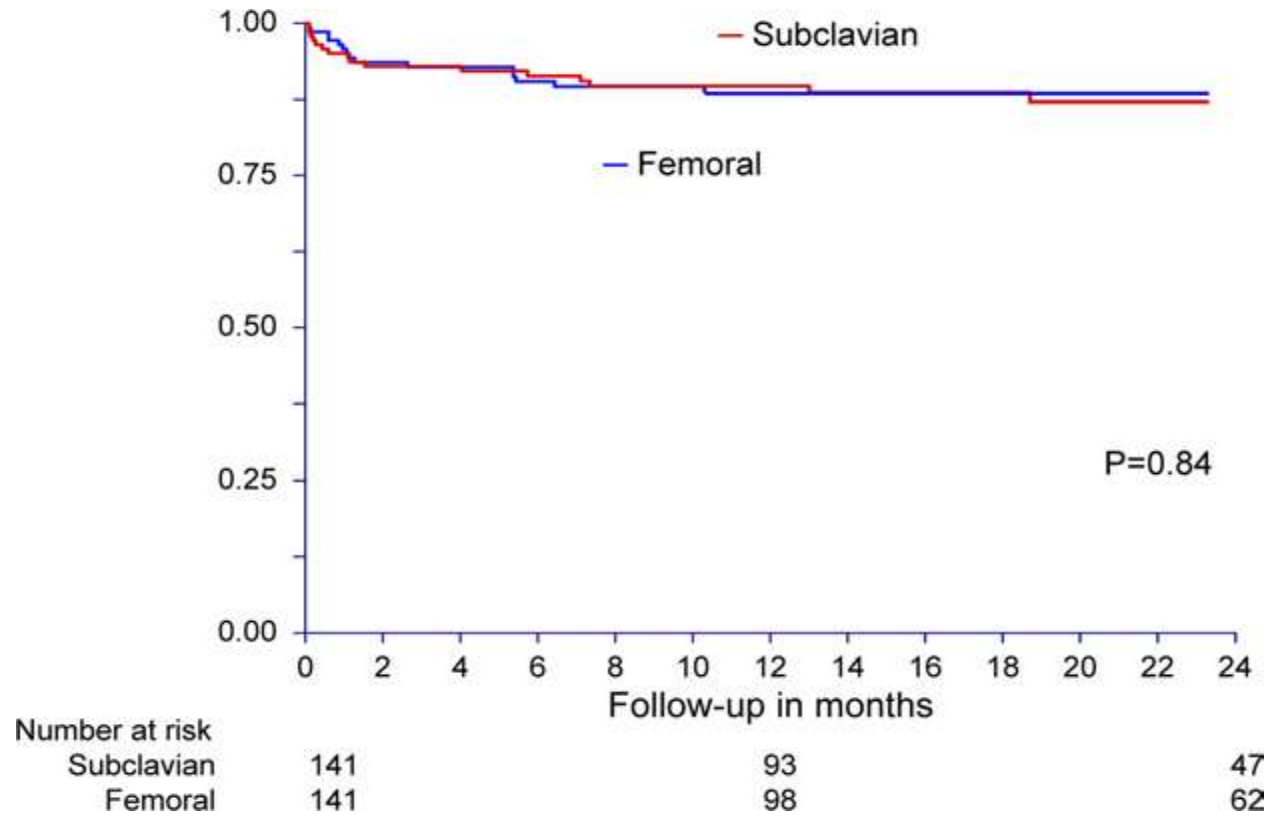


Medtronic, Edwards, St Jude, Boston Scientific, Symmetis investor meetings. *BIBA Medical Quarterly TAVI Report, 2012.*

2-Year Results of CoreValve Implantation Through the Subclavian Access

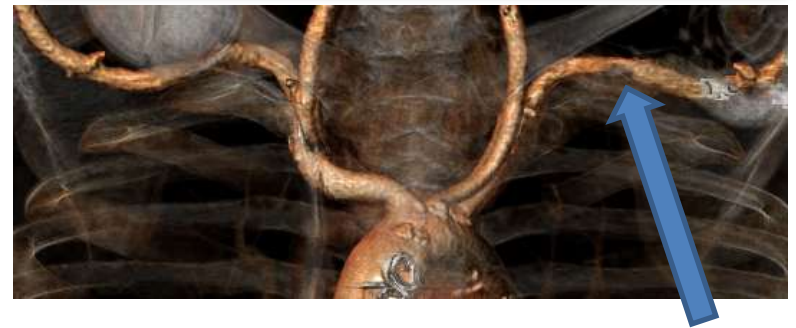
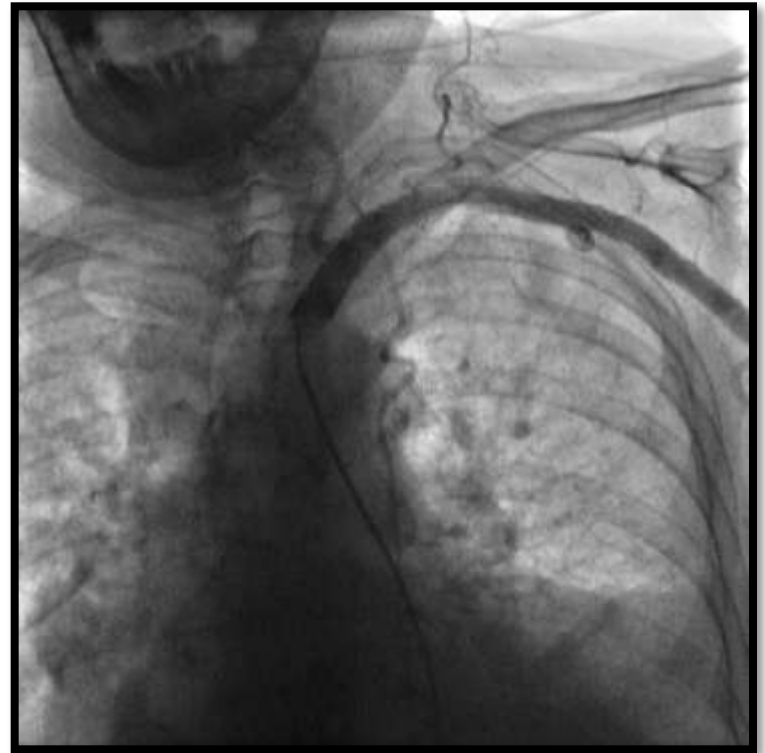
A Propensity-Matched Comparison With the Femoral Access

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Rational for Subclavian Approach

- Subclavian implantation expands patient access to TAVI
 - A subclavian approach provides an alternative for TAVI for patients whose iliofemoral anatomy is compromised due to atherosclerosis, calcifications, or tortuosity
 - Subclavian arteries are often viable in patients with compromised femoral and/or iliac arteries
 - Subclavian access also often presents a better access angle for patients with extremely angulated or horizontal anatomies
 - Local anaesthesia



New Valves

**Transfemoral+subclavian+
Direct Aorta**

New
CoreValve



Transfemoral

Centera



Lotus



Direct Flow



Transapical

JenaValve



Engager (Repositionable
but not Retrievable)

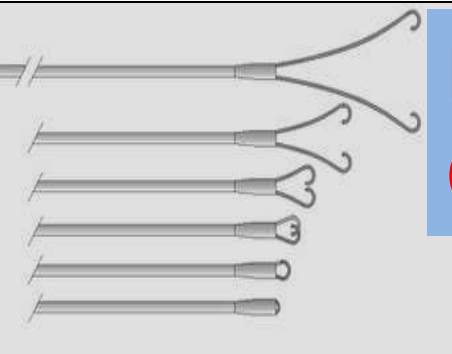
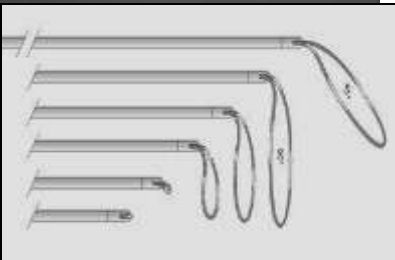


Tailoring a new valve to the subclavian approach

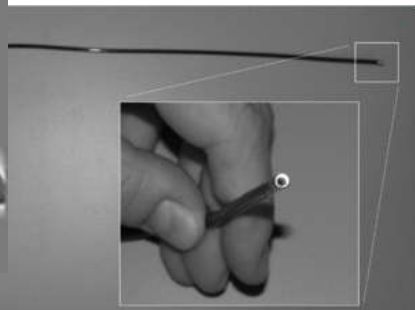
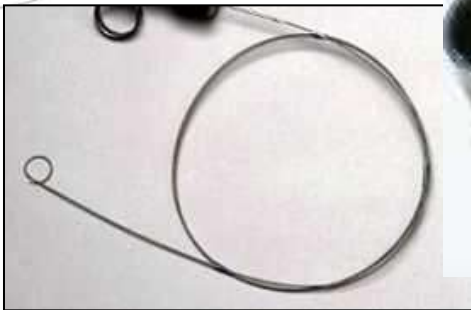
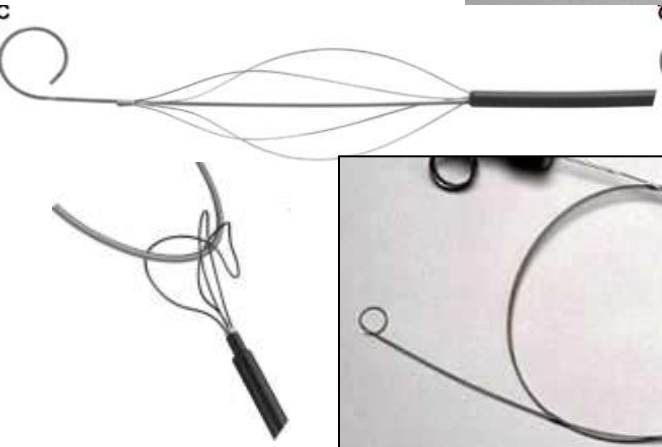
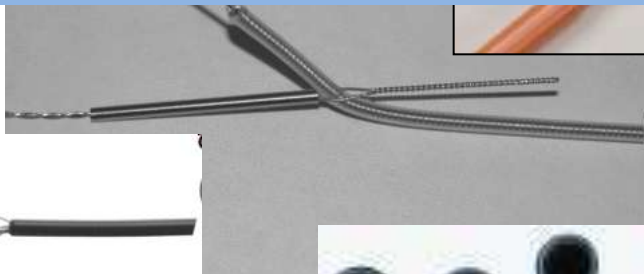


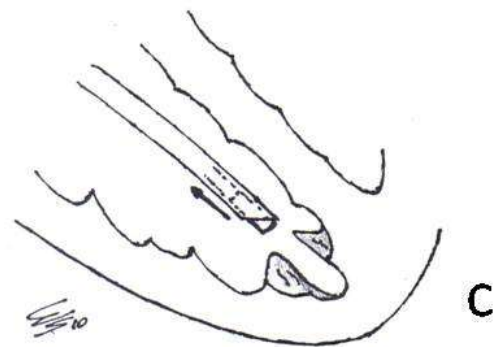
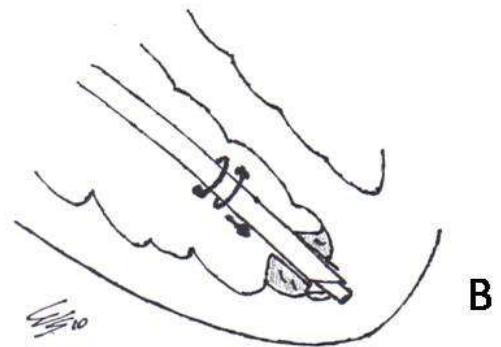
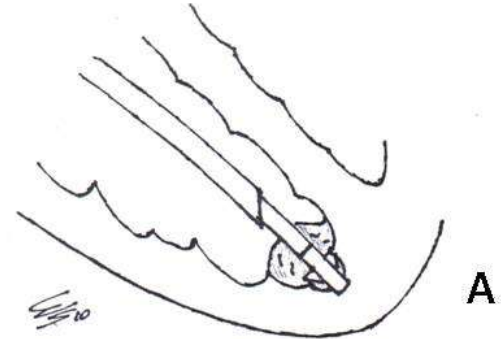
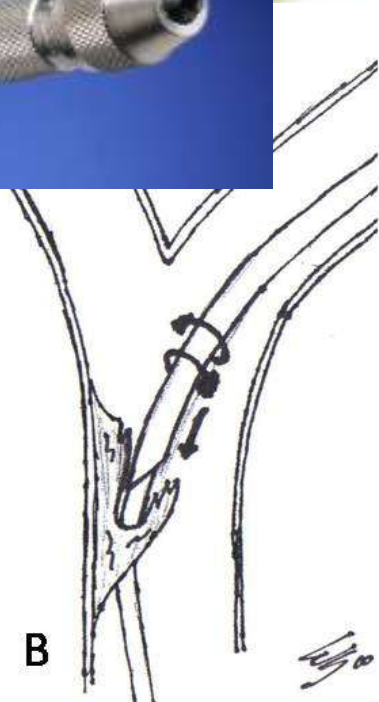
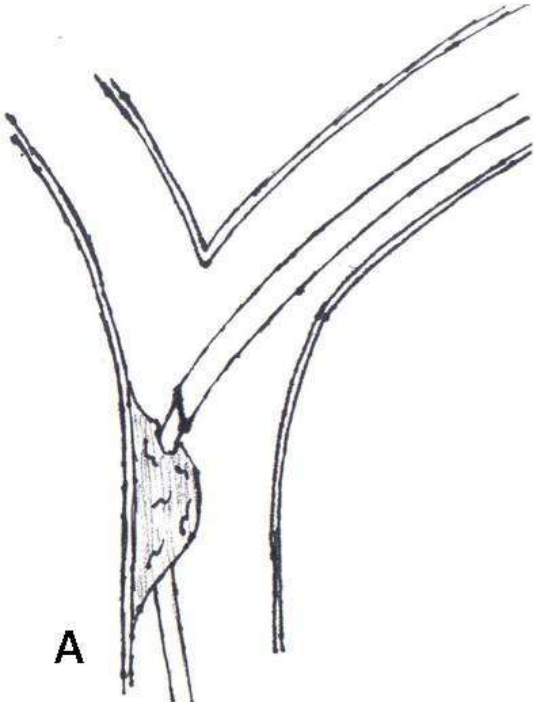
- Dimensions
- Tortuosity
- Calcifications





**PM and ICD 1.5 world wide/year
Complications 5%**

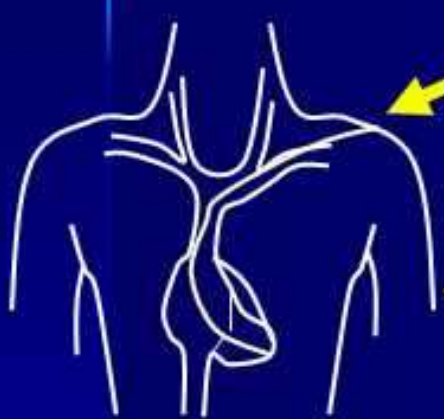




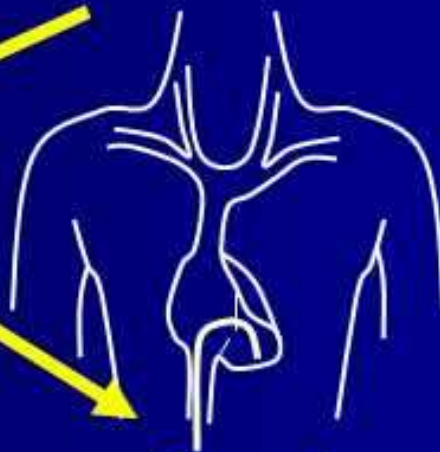
Lead-induced
fibrous tissue



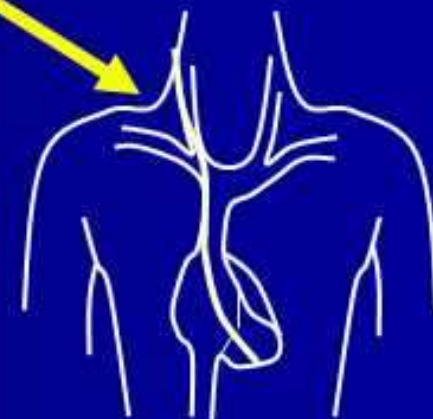
**MULTIPLE VENOUS
APPROACHES**



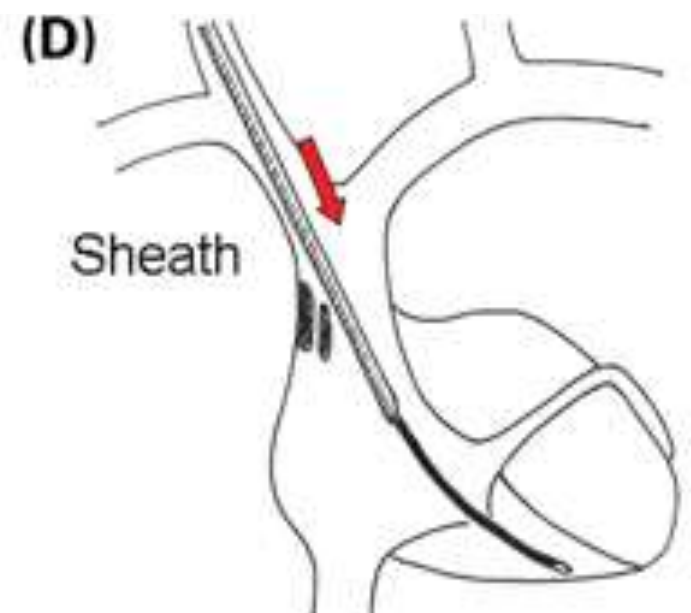
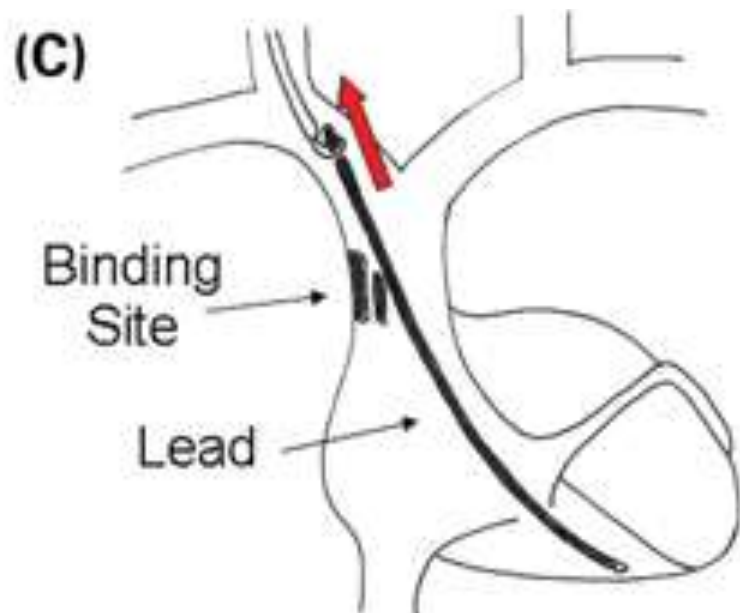
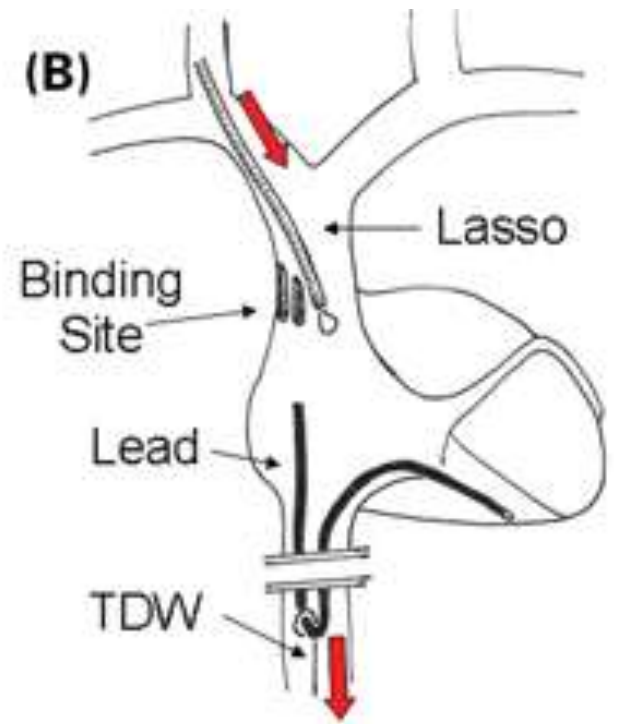
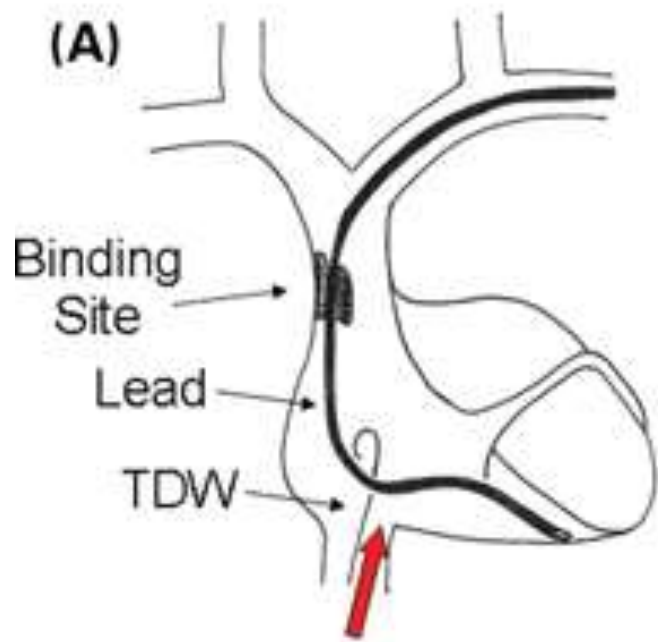
Venous Entry
Approach



Femoral
Approach

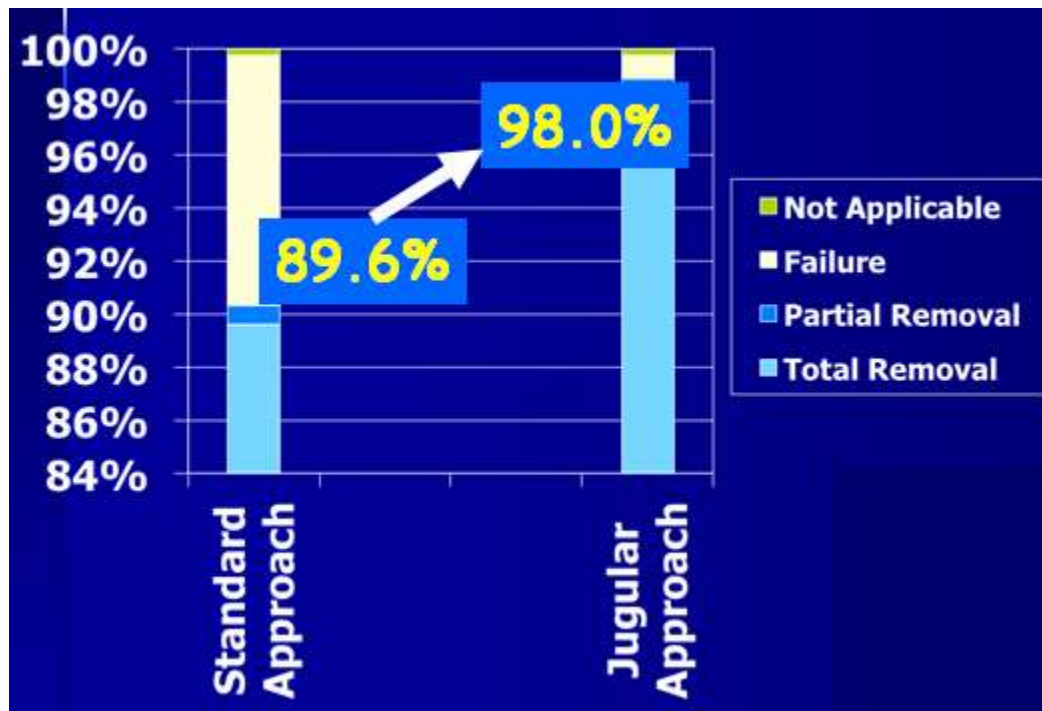


Internal Jugular
Approach



INTERNAL JUGULAR APPROACH in transvenous leads extraction

(January 1997 - December 2013)
2113 Patients - 3843 Leads



Complications:

Standard Approach: 0.4%

After Jugular Approach: 0.6%

