

# **Durability and cost effectiveness of peripheral inserted portcath for chemotherapy**

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# Disclosure

Speaker name:

Dr. Sohiel M.Ayman Nagib

I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)
  
- I do not have any potential conflict of interest

# Objective

Comparison between internal jugular vein and Upper arm approach through basilic or cephalic veins in insertion of total implantable central venous port regarding early post-operative complications, patency rate, patient's compliance and quality of life.

# Patients

50 patients admitted to Alexandria insurance Hospital-Egypt suffering from different neoplastic diseases requiring chemotherapy who underwent percutaneous TIVPP implantation and divided randomly into 2 groups

- Group (A):  
25 patients had central venous approach and anterior chest wall implantation
- Group (B):  
25 patients had peripheral venous approach and fore arm implantation

Between Nov.1<sup>st</sup> 2015- Nov.30<sup>th</sup> 2017

# Methods

All patients were clinically examined and treated as part of routine care, and provided informed consent with institutional review board approval.

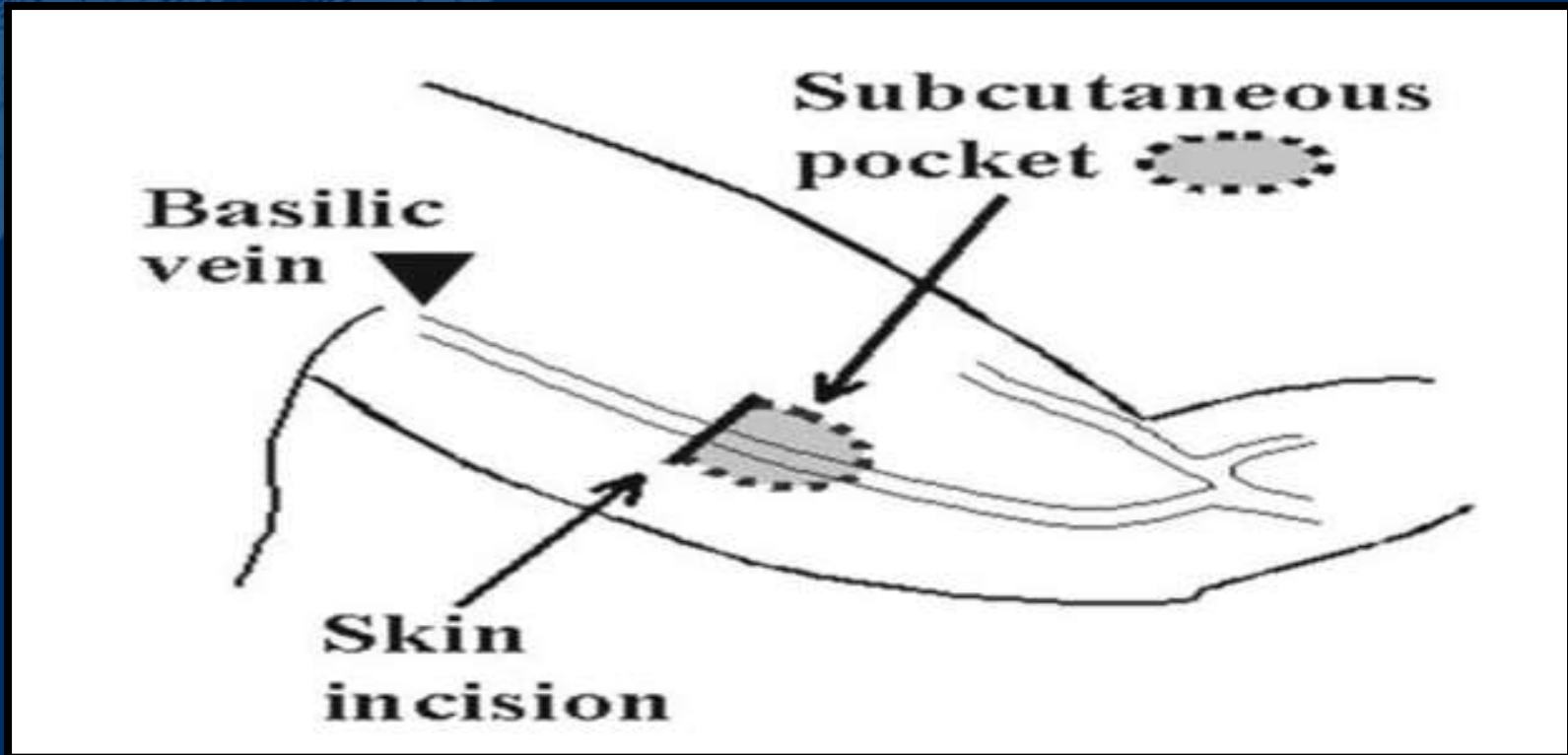
Implantation via an upper arm done through venous cut down, the internal jugular vein was performed using Percutaneous technique. All approaches were Under fluoroscopic guidance.

\*\*\*\*Follow up.

# Patients' Demographic and Baseline Characteristics

	Variable	Number		Percent %
<b>Gender</b>	<b>Male</b>	25		50%
	<b>Female</b>	25		50%
<b>Malignancy</b>	Cancer colon	24		48%
	Cancer stomach	4		8%
	Cancer bone	2		4%
	Others	6		12%
	Cancer Esophagus	4		8%
	Cancer Breast	10		20%
<b>Access site</b>	Central	25		50%
	Peripheral	25	18 basilic	50%
	7cephalic			

# Description of Site of Peripheral Basalic Insertion



# Description of Site of Peripheral BasiliC Insertion





# Easy Access and Better Patient's Compliance



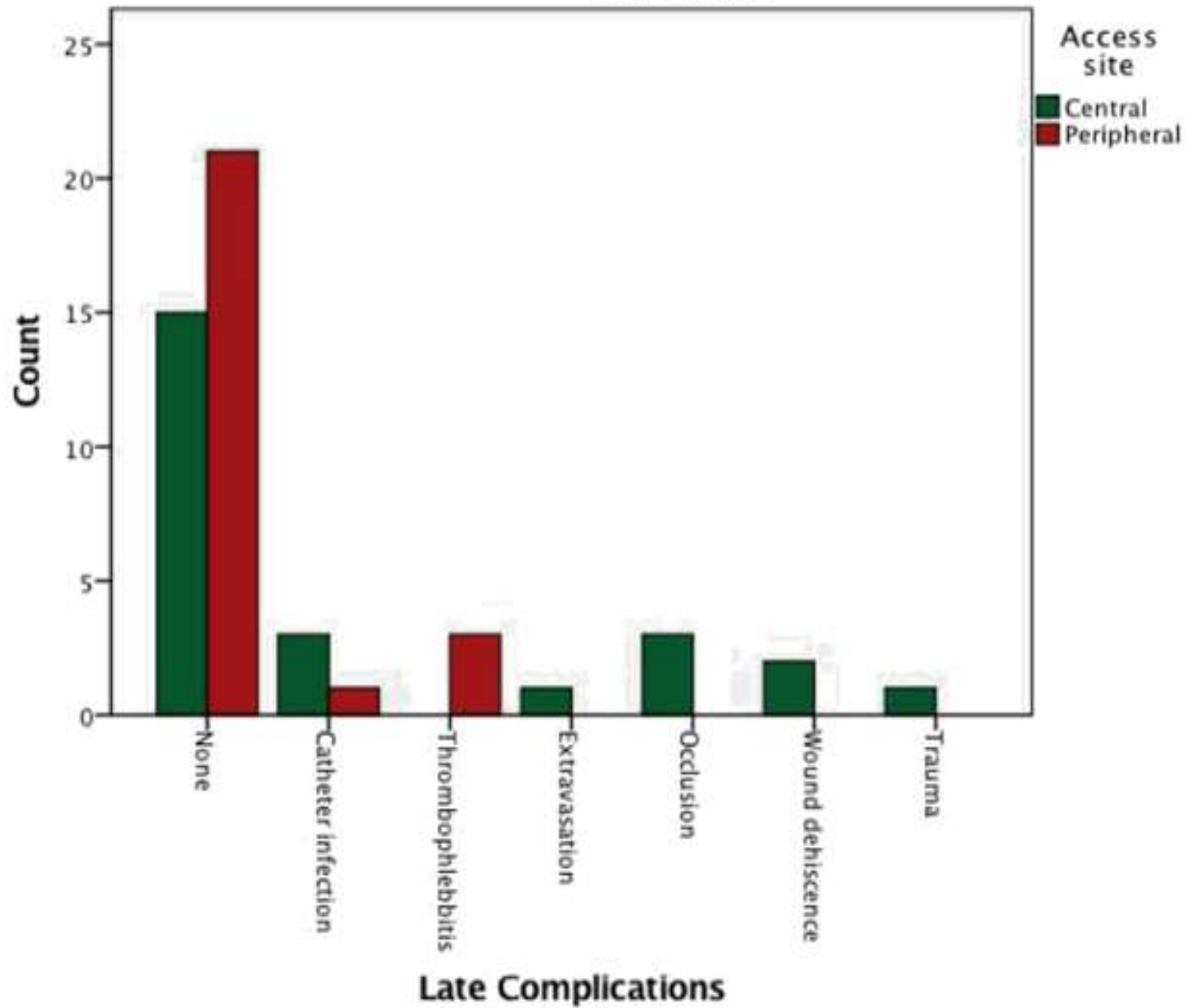
# Intra Operative Complications

		Intraoperative complications				P-value
		None	Arterial puncture	P thorax	H thorax	
Access	Central(25pt)	22 (88%)	3 (12%)	0	0	0.037
Site	Peripheral(25pt)	25 (100%)	0	0	0	
Total	50 pt	47(94%)	3(6%)	0	0	

# Postoperative Complications

		None	Hematoma	Wound infection	Hematoma & wound infection	Seroma	P-value
Access	Central (25pt)	21 (84%)	2 (8%)	1 (4%)	0	1 (4%)	0.407
Access site	Peripheral (25pt)	23 (92%)	0	1 (4%)	1 (4%)	0	
Total	50 pt	44 (88%)	2 (8%)	2 (4%)	1 (2%)	1 (2%)	

### Bar Chart



# Catheter Removal

		Cath occlusion	End of therapy	infection	Patient requested to keep the port	p-value
Access site	Central (25pt)	3 (12%)	4 (16%)	2 (8%)	16 (64%)	0.182**
	Peripheral (25pt)	0	5 (20%)	1(4%)	19 (76%)	
Total	50 pt	3(6%)	9(18%)	3(6%)	35(70%)	

# Patient's Quality of Life

Access site		Patient's ability to take showers	
		No	Yes
Central		0	25 (100%)
	peripheral	0	25 (100%)
Access site		Patient's ability to exercise	
		No	Yes
Central		0	25 (100%)
	peripheral	0	25 (100%)

Access site		Wearing Bras		p-value
		Yes	No	
Central		10 (90.9%)	1 (9.1%)	0.183**
	peripheral	13 (100%)	0	

# Patient's Compliance

		Port causes unpleasant feeling			p-value
		Yes	No	Sometime	
Access site	Central(25pt)	1 (4%)	16 (64%)	8 (32%)	0.486**
	Peripheral(25pt)	0	16(64%)	9 (36%)	
total	50	1(2%)	32(64%)	17(34%)	

		Fear of port trauma			p-value
		Yes	No	Sometime	
Access site	Central25pt	3 (12%)	22 (88%)	0	<0.0001**
	Peripheral25pt	5 (20%)	11 (44%)	9 (36%)	
total	50pt	8(16%)	33(66%)	9(18%)	

# Conclusion

TIVPPs can be implanted with high technical success rates, and upper arm implantation may be beneficial for clinicians and patients with respect to reducing the risk of intra operative complications such as arterial injury, pneumo or hemothorax, noninterference in breast imaging, easier access to puncture, and better cosmetic results with better quality of life



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