

Position and Characteristics of Interventional Nephrologist in Japan

- Vascular Access in Dialysis, Preparation and Efficacy -



***IMS Miyoshi General Hospital,
Dialysis Unit***

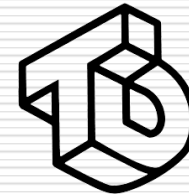
Takashi SATO, MD, PhD

Two Major Societies on Nephrology and Dialysis Therapy in JAPAN

- The Japanese Society of Nephrology (JSN) was founded in 1959, with over 11,000 member.



- The Japanese Society for Dialysis Therapy (JSDT) was founded in 1968, with over 18,000 member.



The American Society of Diagnostic and Interventional Nephrology (ASDIN) was founded in 2000.

Mission

The mission of the American Society of Diagnostic and Interventional Nephrology is to promote the appropriate application of new and existing procedures in order to improve the care of patients with kidney disease.

The American Society of Diagnostic and Interventional Nephrology was founded in 2000 to promote the proper application of new and existing procedures in the practice of nephrology with the goal of improving the care of nephrology patients.

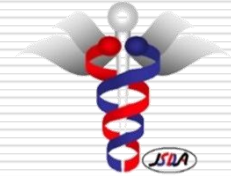
These procedures include, but are not limited to:

- insertion of tunneled hemodialysis and peritoneal dialysis catheters,
- endovascular procedures,
- and diagnostic sonography.

Japanese societies related to “Dialysis Access”

- **The Japanese Society for Dialysis Access (JSDA)** was founded in 1998

International Collaboration with
Vascular Access Society
Vascular Access Society



- **The Japanese Society of Interventional Therapy of Hemodialysis (JSITH)** was founded in 2011

• Creation and management of hemodialysis and peritoneal access
• Insertion of tunneled hemodialysis catheters
• Endovascular procedures
• Diagnostic sonography, etc.

- **The Japanese Society of Interventional Nephrology (JSIVN)** was founded in 2021

The first Japanese Meeting of Interventional Nephrology was held in 2013

Current Status and Roles of Nephrologists involved in Vascular Access Creation and Management in Japan

- **VA Creation and Repair in Japan -from the JSDA Survey Results-**

Fukasawa, Mizuya, Ohira, Seiji, Kawanishi, Hideki et al.

These contents were presented at DAS 2017 in Nagoya

Current status of vascular access in Japan—from Dialysis Access Symposium 2017

Mizuya Fukasawa. JVA (2019) 20(1S): 38–44

- **Interventional nephrology: current status and clinical impact in Japan**

M Ikeda, H Terawaki, E Kanda et al. Clin Exp Nephrol (2018) 22:437–447

VA Creation and Repair in Japan -from the JSDA Survey Results-

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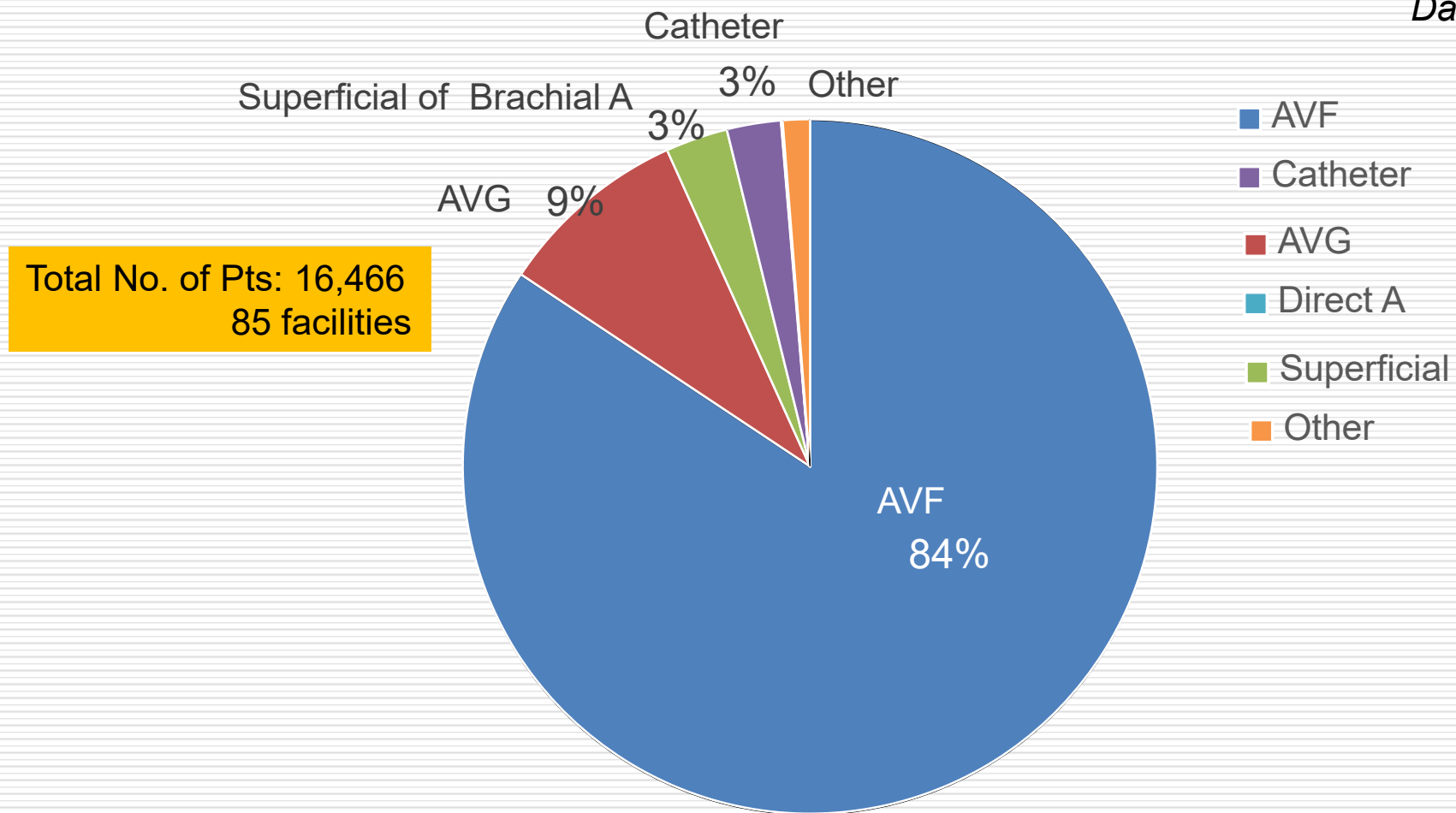


Number of Facilities	85	(1 Excluded analysis due to insufficient facility data)			
All responses	81	facilities			
Partial responses	4	facilities			
				Reference	
				Japanese Society for Dialysis(JSDT) survey 2015	
Number of patients	16,466	pt	324,996		
< 65 years old	5,991	pt	36.4%	109,195	33.5%
≥65 years old, < 75	5,453	pt	33.1%	103,709	33.1%
≥75 years old, < 85	3,911	pt	23.8%	76,935	24.5%
≥85 years old	1,106	pt	6.7%	23,373	7.5%



Types of Vascular Access in Japan

Data from JSDA, 2017

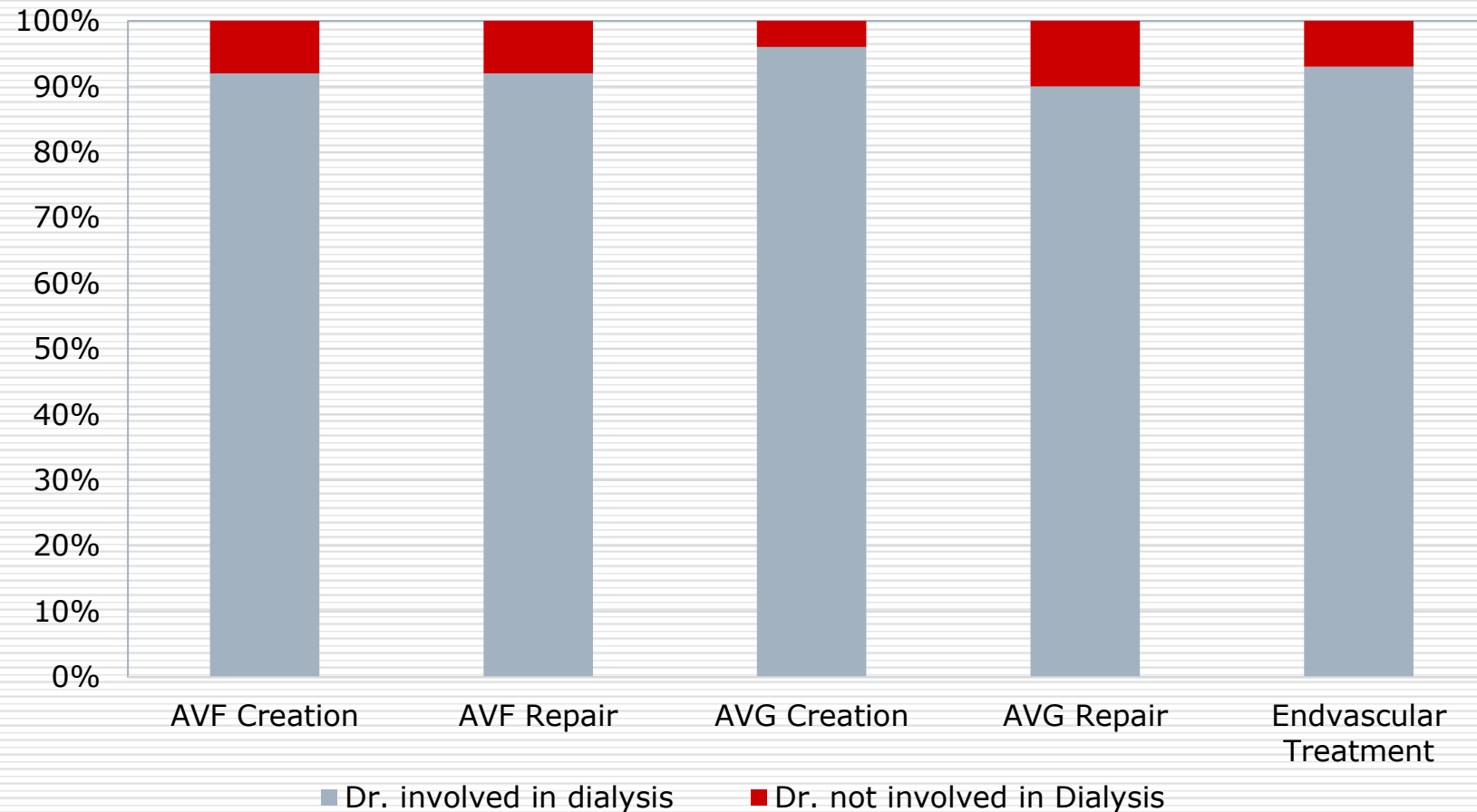


Percentage of Doctors Involved in Dialysis Management

- Creation and Management of Vascular Access -



Data from JSDA, 2017

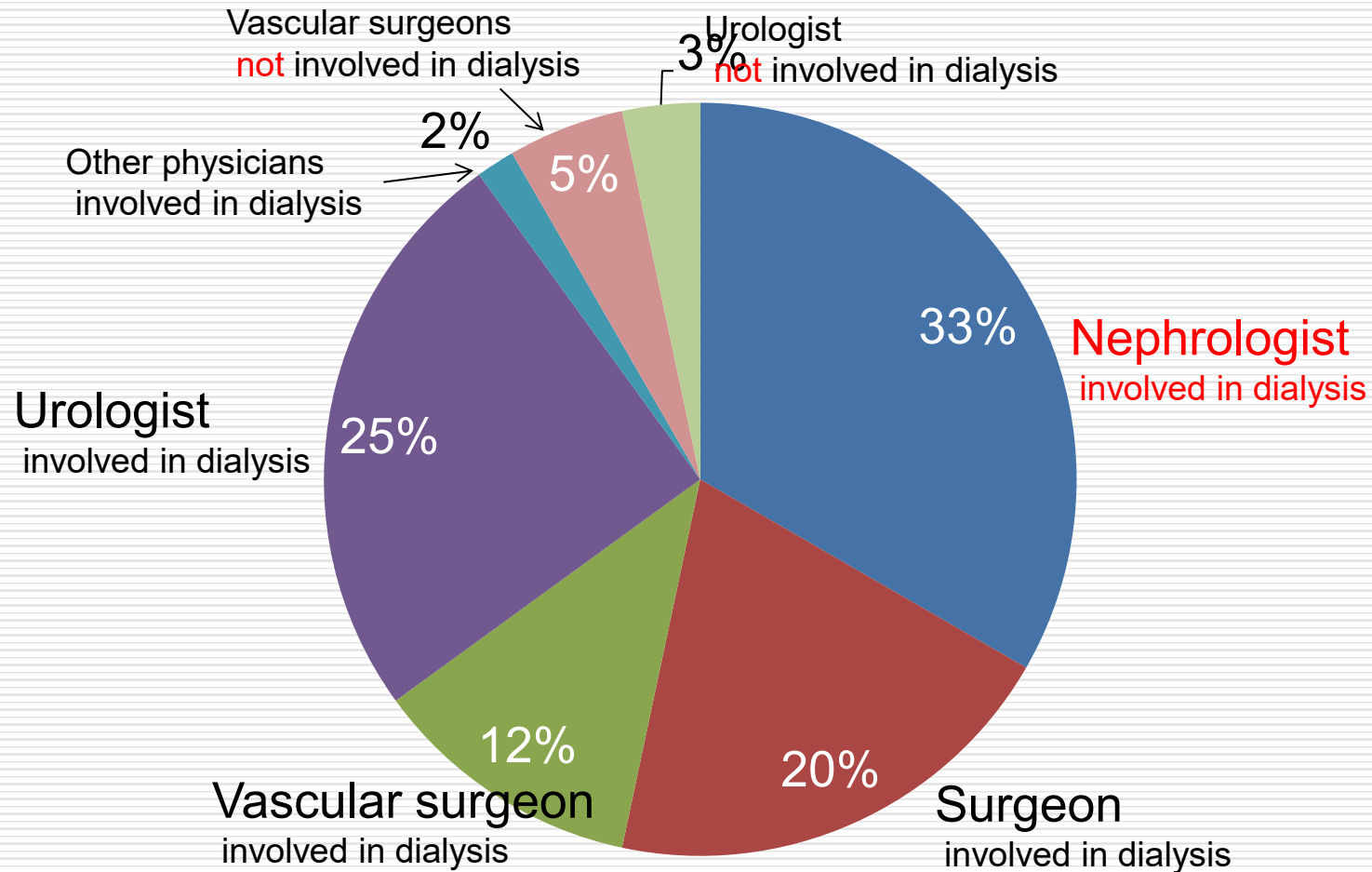


Vascular Access Surgical Practices

- Who places the vascular access (AVF) -



Date from JSDA, 2017

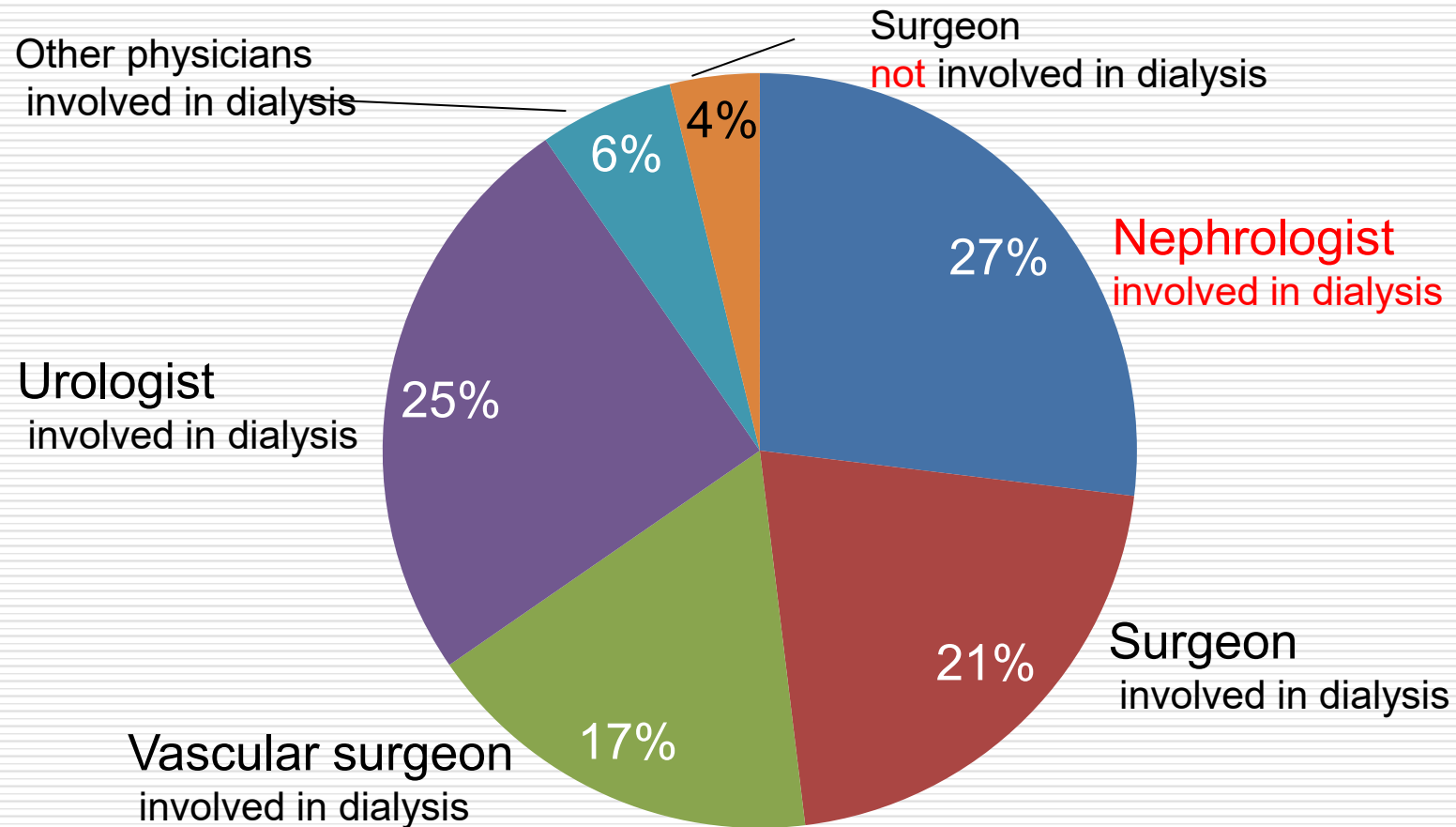


Vascular Access Surgical Practices

- Who places the vascular access (AVG) -



Data from JSDA, 2017

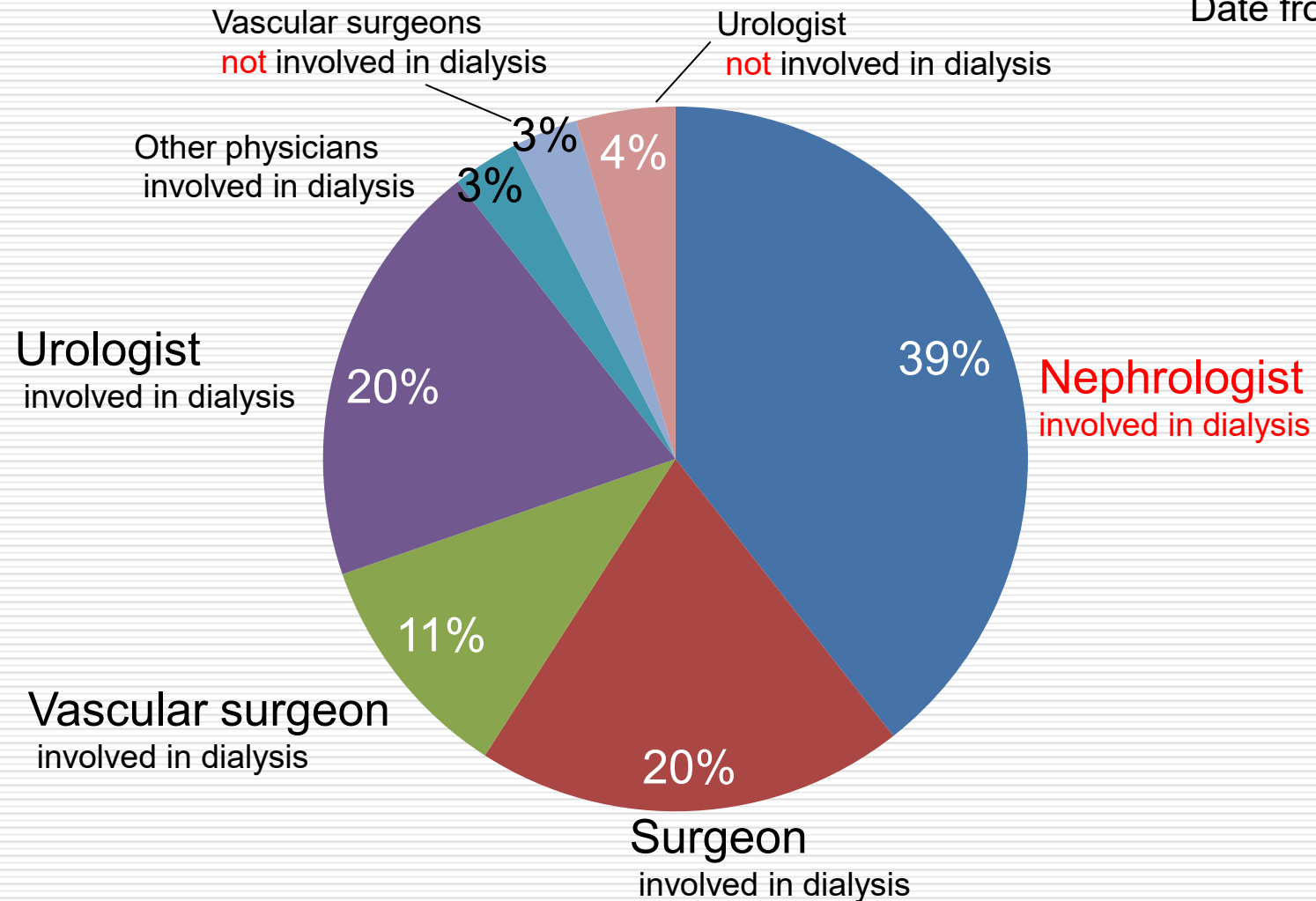


Vascular Access Endovascular Practices

- Who performs endovascular treatment -



Date from JSDA, 2017



The survey results of this JSDA study can be summarized as follows;

- In more than 90% of cases, VA creation and management were carried out by doctors involved in dialysis care in Japan.
- The unique characteristic of Japan is that the creation and management of vascular access is performed by doctors involved in dialysis across a wide range of disciplines, including nephrologists, urologists and surgeons.
- This might be one factor contributing to the current VA condition and it's well patency rate in Japan

Frequency of procedure performance and involvement to procedure by nephrologists, non-nephrologists or their collaboration

Interventional nephrology: current status and clinical impact in Japan

M Ikeda, H Terawaki, E Kanda et al. Clin Exp Nephrol (2018) 22:437–447

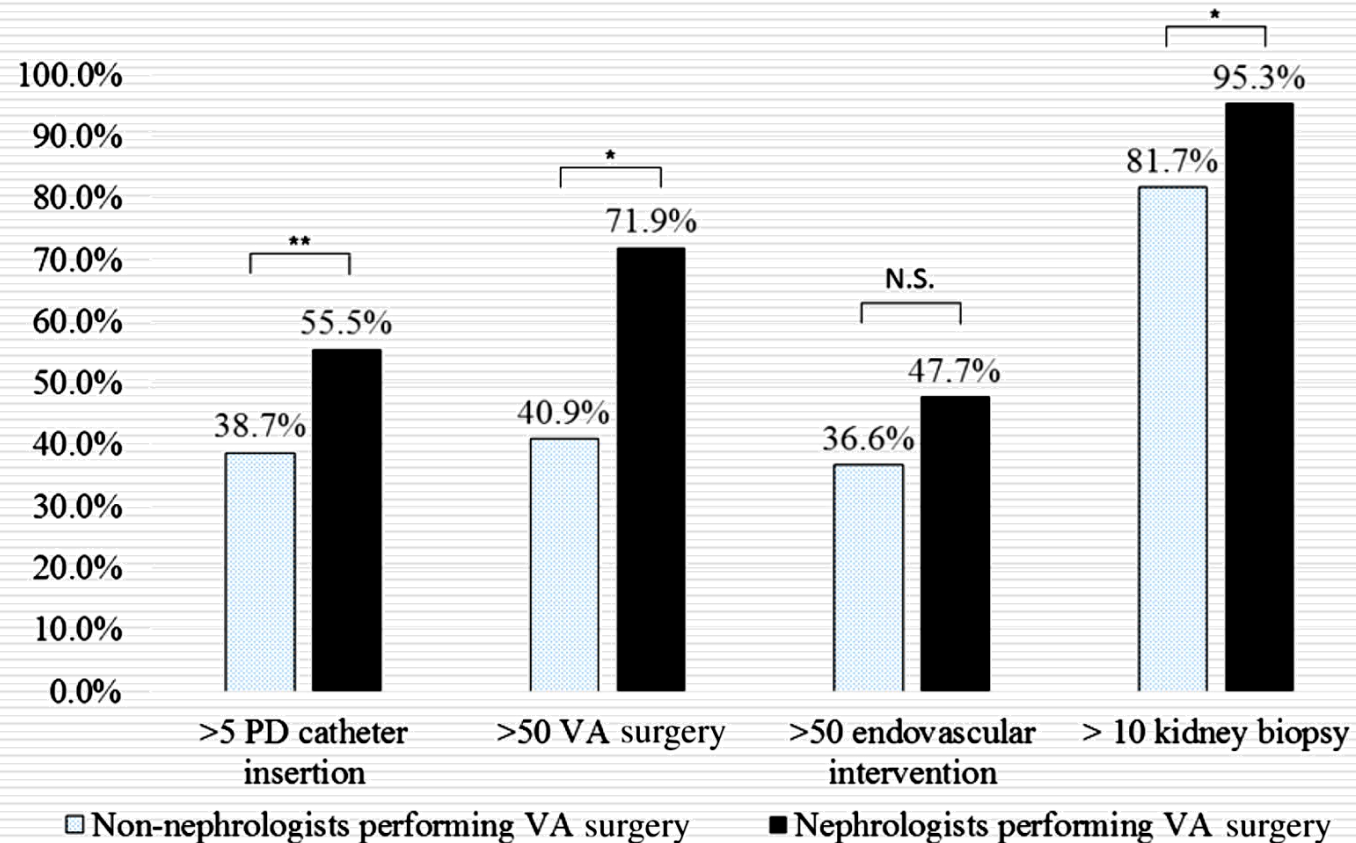
	PD catheter insertion	Vascular access surgery	Endovascular intervention	Kidney biopsy
Total performing institutions	250/328 (76.2%)	316/328 (96.3%)	290/328 (88.4%)	309/328 (94.2%)
Nephrologists	75 (30.0)	110 (34.8)	113 (39.0)	263 (85.1)
Collaboration	44 (17.6)	61 (19.3)	41 (14.1)	27 (8.7)
Non- nephrologists	131 (52.4)	145 (45.8)	136 (46.9)	19 (6.1)

();%

Comparison of the annual procedure volume between institutions in which VA surgery was managed by nephrologists and non-nephrologists

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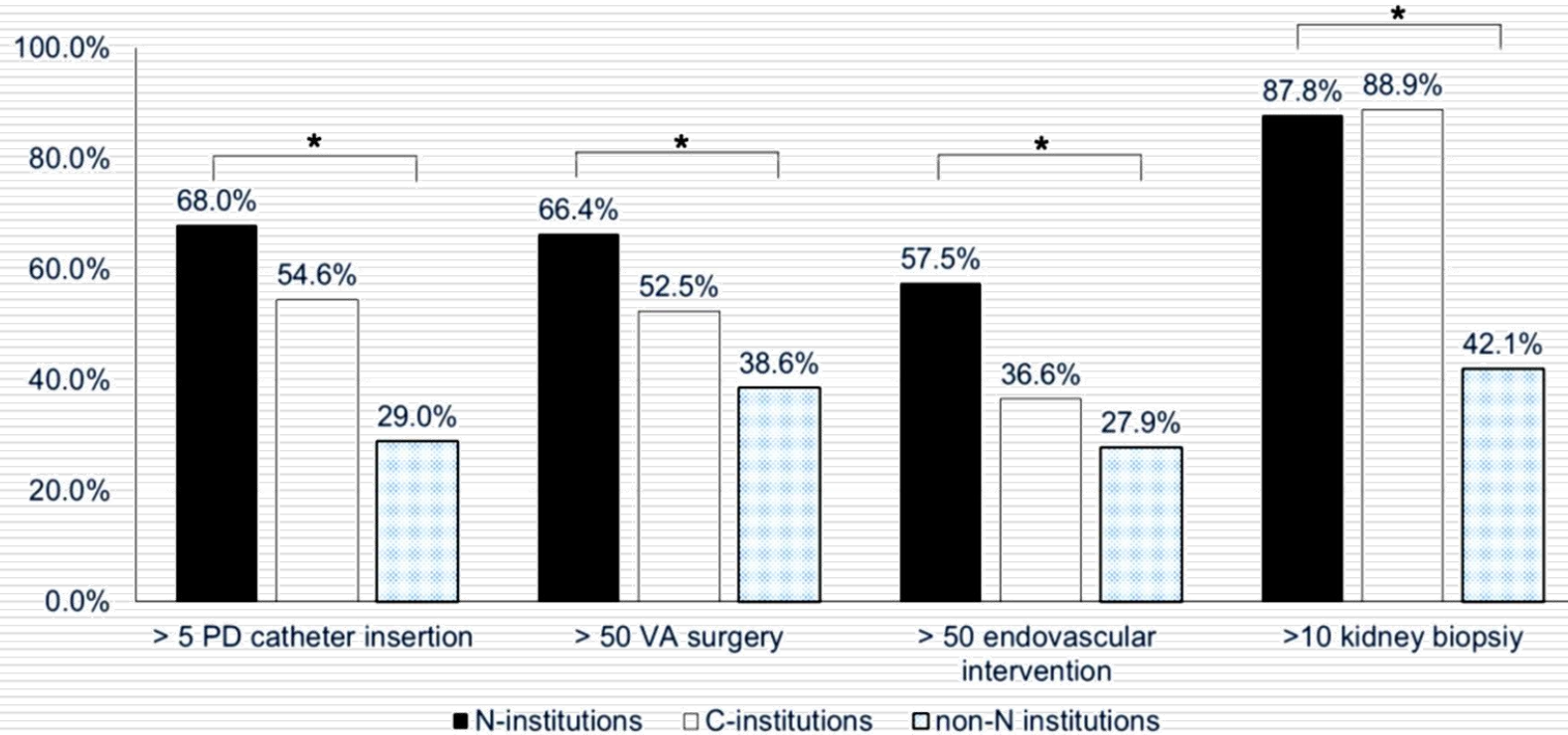
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Associations between Procedure Manager and Procedure Volume

Interventional nephrology: current status and clinical impact in Japan

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The survey results of this JSIVN study can be summarized as follows;

- Main manager of all 4 procedures (PD cathe. Insertion, VA surgery, Endovascular intervention and Kidney biopsy) was nephrologist already in Japan.
- All procedure volume increased as nephrologists become more involved.
- Acquisition of one specific procedure by nephrologist associated with increase in not only this specific procedure volume, but also the other procedure volume.

Conclusion

- Interventional Nephrologists in Japan is already frequently involved in procedures such as VA creation, VA repair and endovascular treatment.
- The higher volume center, the greater involvement of Interventional Nephrologists in the procedure.
- The involvement of Interventional Nephrologists in VA creation and management increases their involvement in other procedures.
- In Japan, more than 90% of VA creation and management is done by various specialists involved in dialysis care.

I would like to call these specialists, including Interventional Nephrologists, collectively “Dialysis specialists” or “Dialysisnist”.

