

The Concept and Management of Vascular Center *-WHAT IS ITS AIM AND HOW TO ORGANIZE IT-*

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B.B.Lee, MD, PhD, FACS
Professor of Surgery and Director
Center for Vascular Malformation and Lymphedema
George Washington University, Washington DC, USA

Adjunct Professor of Surgery
Uniformed Services University, Bethesda, Md, USA
Visiting Professor of Surgery
Johns Hopkins University, Baltimore, Md, USA

DISCLOSURE OF CONFLICTS OF INTEREST

BYUNG-BOONG LEE, MD, PhD, FACS

The Concept and Management of Vascular Center

-WHAT IS ITS AIM AND HOW TO ORGANIZE IT-

I do not have any relevant financial relationships with any commercial interests.

New Concept of Vascular Center

B.B. Lee, MD
GWU

- Traditional concept on the diagnosis and management of vascular disorders has been established through the last century based on the *limited* knowledge mostly through the clinical findings/experiences.
- But rapidly advancing technology in medical field through the last three decades has brought a **revolutionary change on the concept** in the field of vascular medicine and surgery in particular.
- And many complicated vascular disorders involved to the circulation system, previously known as an enigma in modern medicine, became better understood now (e.g. vascular malformation).

New Concept of Vascular Center

- Not only advanced diagnostic technology but also therapeutic modalities (e.g. endovascular management) provided a crucial role to establish a contemporary concept for advanced management of various vascular disorders which were used to be too risky to tackle; even 'once-tabooed' territory with a notorious reputation like vascular malformation has been successfully managed through last two decades by advanced approach as a group of specialized team under the *new system of Vascular Center*.
- Beyond the basic interdisciplinary collaboration, various multispecialty experts involved are now fully integrated to tackle the complicated vascular issues together through the '*orchestrated*' efforts toward a single goal to improve patient welfare/quality of life.

New Concept of Vascular Center

- This new concept based on the system of 'vascular center' has provided a **multidisciplinary team approach** to encounter various disorders most effective way and resulted in a tremendous progress on the management of various challenging vascular problems as a symbol of '*new concept with new system*'.
- Such contemporary concept of specialized vascular team/center was able to emerge through pioneering experience by the forefathers of vascular-transplant surgery in early decade of '70 through unknown territory of the organ transplantation based on a maximum collaboration among handful specialists involved to the immunosuppressive care to handle so many unseen/untold complications and morbidities no one previously experienced.

New Concept of Vascular Center

- Through the learning curve, we were convinced that 'fully integrated team of multispecialty' was the best solution to reduce the risk involved in complicated vascular disorder known as a new mine field.
- Based on this experiences, often with painful mistakes, a new idea of vascular center was born from a few leading tertiary care centers in the U.S. based on new principle of 'multidisciplinary approach'.
- We improved this new system of Vascular Center by 'trial and error', like organizing a new symphony orchestra/chorus; 'learning how to sing together on same tune' remained a key for the success.

New Concept of Vascular Center

Vascular center we organized as an advanced care system is solely dedicated as the system:

- System to run efficiently by Clinical Director, Admin Manager, Admin Assistance (Secretary), Receptionist, Clinic Nurses, Clinical Nurse Coordinator, Research Coordinator, Technician & Technologists (Vascular Lab), Clinical Fellow (Vascular Surgery), Research Fellow (Vascular Surgery), Senior Resident (General Surgery), Ph.D. Research Staff (Experimental Surgery), and Consultants & Peer-reviewers.
- System experimented and proved for its efficacy through CVM Clinic of SamSung Medical Center, Seoul, Korea, officially organized in 1996, following special training of each specialist involved -15 departments- for one year, and subsequent dry run of the team work for 3 months.

New Concept of Vascular Center

Management – Algorithm

- The designated clinician of vascular surgeon and/or vascular medicine interviews the patient first when referred as the candidate of special care, and then assigns the patient to the individual team member; specialist/consultant for the necessary evaluation/assessment.
- Following the full investigation by each specialist involved, all the information collected by Clinical Nurse Coordinator is presented to the multidisciplinary clinic team by Clinical Fellow; a final decision is made based on the consensus among the multidisciplinary team members after fully reviewed and discussed together with/without additional/revised consultation to mandated specialists.

New Concept of Vascular Center

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Management – Algorithm

- First decision for the patient by the clinic team following the precise diagnosis of the nature of the disease, is whether the patient should need a treatment or not.
- Once the decision for the treatment is made based on the general guide line of inclusion/exclusion criteria, further decision is made for the proper selection of optimum kind/degree of the treatment and proper time to start the treatment.
- The applicability of the specific therapy selected is carefully assessed with individualized tailoring and monitored by the nurse coordinator; follow up assessment result is periodically reviewed for the further modification when indicated.

New Concept of Vascular Center

We were able to organize five different vascular specialty clinics by the necessity within a new system/concept of vascular center in early '90, sharing limited resources, and started as small groups to tackle five different vascular issues based on the multidisciplinary team approach;

- Stroke Prevention Carotid Clinic
- Vascular Malformation Clinic
- Lymphedema Clinic
- Diabetic foot and ulcer Clinic
- Vasculitis and related Clinic

New Concept of Vascular Center

- Based on the experiences for average 4 to 5 years, most of the clinics were further expanded to fully independent Vascular Center of Specialty.
- Among them, 'vascular malformation clinic' became most successful with maximum utilization of all the potential resources- man power in particular from 15 different specialties- and now expanded to incorporate vascular tumor/(infantile/neonatal) hemangioma to organize 'Vascular Anomaly Center'.

We are eager to share our experience to help others avoid same mistakes we have made; many can take the advantage on someone else's dirty laundry/ mistake.

New Concept of Vascular Center

Conclusion

- Vascular Center as an advanced care system can provide improved management of complicated vascular disorder, based on contemporary concept of fully integrated traditional surgical therapy with various newly adopted non-surgical as well as medical therapy as new strategy.
- Multidisciplinary approach with new treatment strategy can improve overall management with a reduced morbidity and recurrence over the conventional approaches, even to the once tabooed lesion due to prohibitively high morbidity accompanied.

Thank you for your attention!