

Rotation of Valvular Heart Disease

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The valvular heart disease rotation is targeted for senior fellows who are in their 3rd or 4th year of training and are interested in advancing their knowledge in the evaluation and management of patients with single or multiple valvular disease. It is appropriate for any fellows, including those pursuing interventional training, advanced imaging, or general cardiology. It provides an opportunity to understand the mechanisms of valvular disease and its effect on cardiac function. The duration of the rotation is a minimum of 6 months and up to 1 year.

Objectives:

- 1) Understand the natural history of aortic stenosis and the potential therapeutic options available.
- 2) Understand the evaluation process of patients considered for transcatheter aortic valve replacement (TAVR).
- 3) Interpret the imaging modalities utilized for procedural planning and patient selection in patients undergoing TAVR.
- 4) Interpret hemodynamic assessment of valvular disease.
- 5) Evaluate patients with mitral regurgitation and provide guidance on surgical referral and other catheter based therapies.
- 6) Understand the concept of operative mortality risk and its effect on patient referral for invasive therapies.

Participants are expected to:

- 1) Assist with the evaluation of the initial office visits at the Center of Valvular Heart Diseases (Monday afternoons), including pre-review of outside records, in-clinic review of outside/BJH imaging, and dictation of new patient visits.
- 2) Perform inpatient consultation of patients considered for catheter valve replacement or repair.
- 3) Participate in the multidisciplinary valve meeting held on Tuesday mornings at 7:00 AM.
- 4) Actively participate in the preoperative and post-operative management of patients undergoing transcatheter aortic valve replacement (TAVR) during morning rounds.
- 5) Review and interpret all transthoracic and transesophageal echocardiograms of patients on the service.
- 6) Participate, when able, in the invasive assessment of coronary disease and hemodynamic assessment of patients with valvular heart disease.
- 7) Familiarize with the intraprocedural echocardiographic assessment of patients undergoing catheter based valve procedures
- 8) Familiarize with the steps required to perform TAVR
- 9) Interpret and manipulate the CT angiographic images of patients undergoing TAVR for procedural planning and access route selection.
- 10) Visit the operating room during a surgical valve replacement/repair to further understand the procedures.
- 11) Finish at least one research project related to valvular heart disease during their rotation.

Competencies:

- **Patient Care:** The fellow is expected to gain expertise in the management of complex valvular heart disease. The fellow will act as a consultant providing input on the evaluation for valve disease severity, need and benefit for valve intervention, candidacy for valve procedures. The fellow will coordinate imaging and other invasive studies (catheterization) to further define the treatment options.
- **Medical Knowledge:** The fellow will be expected to research the clinical trials that support the therapy of these patients. It is expected that the fellow will present the results of trials that are critical to the care of their patients at teaching rounds. It is expected that the fellow will have a clear understanding of the how to assess the severity of the valvular lesions invasively (right/left heart catheterization).
- **Interpersonal and Communication Skills:** The fellow must demonstrate caring and respect for all patients and families. They are expected to present their patients at the multidisciplinary meetings.
- **Professionalism:** The fellows will demonstrate respect and compassion. The fellows will understand that they are the representatives of the Cardiovascular Division and will be expected to perform in a professional manner.
- **System-based Practice:** The fellow must work well in a complex system of nurses, social workers, and other healthcare professionals. The fellow will try to facilitate the transition from inpatient to outpatient.
- **Teaching Methods:** The primary mode of learning will be through teaching rounds with the attendings. Teaching rounds will occur daily.
- **Evaluation Methods:** At the end of the block, the fellow will meet with the attending for feedback. One attending will be asked to complete the evaluation in *MyEvaluations.com*.

References:

See binder.