



Weill Cornell Medical College

┌ NewYork-Presbyterian Hospital
└ Weill Cornell Medical Center

Perkin Center for Heart Failure, Mechanical Circulatory Support and Pulmonary Vascular Disease at NewYork Presbyterian Hospital/Weill Cornell Medical Center delivers personal and individualized care for patients with heart failure of any etiology, complex valvular heart disease and cardiac disease as the “bystander” of complex systemic diseases. Patient population may include the gamut of those for whom efforts needs to be mainly lifestyle adjustments to those who may benefit from home inotrope therapy via a continuous infusion pump to those who require evaluation for short or long term mechanical circulatory assistance. Due to the combination of “hats” that our team members wear, our highly experienced team can be superb medical diagnosticians for the complicated heart failure patient and coordinate appropriate consultations and subspecialty care.

For our referral colleagues, our expertise includes:

Implantation of left ventricular assist devices (LVAD) as "destination therapy" or to bridge patients to transplant or to transplant candidacy: Appropriate patients for LVAD include those with recurrent admissions for heart failure, worsening renal insufficiency, intolerance to heart failure medications due to hypotension, WHO 2 PH ie. secondary pulmonary hypertension, and low VO₂ of 14 ml/min/kg upon cardiopulmonary exercise testing.

Early interhospital transfer of shock patients: Patients with cardiogenic shock from ventricular tachyarrhythmia (VT) storm, congestive heart failure, or acute myocardial infarction prior to onset of organ hypoperfusion may benefit from emergency procedures such as shortterm CentriMag® biventricular assist device (BIVAD), ECMO support following attempts at pharmacological therapies. We are happy to assist in early calls to transfer these patients and support them through the acute event as appropriate. Ideally, these patients should be transferred early in their disease course, prior to renal or hepatic insufficiency when IABP support is insufficient.

Acute decompensated right heart failure: Because of our expertise in pulmonary hypertension and “the other side of the heart,” we are one of just a few centers providing specialized care for such patients. Patients with the nuanced mixed etiology of pulmonary hypertension, “pulmonary hypertension out of proportion to left atrial pressure,” and severe biventricular heart failure will gain from our expertise.

Pulmonary hypertension management: Our expertise in the evaluation and management of all types of pulmonary arterial hypertension (WHO Groups 1-5) is unmatched in the metropolitan area.

Heart transplant evaluation: We provide services to evaluate patients regarding their candidacy for transplantation, including placing them on the transplant waiting list at New York Presbyterian Hospital/Columbia University Medical Center and delivering all aspects of pretransplant care (such as VAD support).

Valvular heart disease: We evaluate patients prior to high risk surgery and all catheter based interventions and deliver expert perioperative management for these complicated patients, many of

whom have heart failure and pulmonary hypertension. As a critical part of the large TAVR and structural heart disease program, we offer the extra expertise of “geriatric” heart failure and secondary pulmonary hypertension management. For those younger patients where we will be pursuing high risk conventional surgery, we work closely with our CT surgery and cardiac anesthesiology in co-managing this difficult cohort.

We provide specialized care for patients with heart failure and normal ejection fraction; those with restrictive cardiomyopathy, hypertrophic cardiomyopathy, sarcoid or amyloid infiltration of the heart; and women with peripartum cardiac disease.

Knowing when we should be discussing supportive palliative end of life care is essential to the care of patients with advanced heart failure, and our staff is skilled in addressing these issues in a compassionate manner.

Our superb noninvasive imaging, catheterization lab and electrophysiology groups are an essential part of the collaborative evaluation and allow “cross fertilization” for new and collaborative approaches to these disease entities.

Procedures that are done

Cardiopulmonary exercise testing

Right heart catheterization with peripheral and/or pulmonary vasodilator testing, exercise for tailored therapy, especially for mixed etiologies of diseases

Cardiac biopsy with specialized studies for various diseases

Advanced imaging (cardiac MRI, CT and advanced echocardiography)