- Paragangliomas are rare catecholamine-producing tumors derived from chromaffin cells that course over the course of the disease and in some patients becomes manifest after tumor resection. Most often, pulmonary edema occurs during the course of the disease and in some patients becomes manifest after tumor resection. Although pulmonary edema is common in origin in most patients, some patients have noncardiogenic pulmonary edema. This edema is thought to be the result of a catecholamine-induced transient increase in pulmonary capillary pressure owing to pulmonary venoconstriction and increased pulmonary capillary permeability.

- Patients who have pheochromocytomas who present with an acute onset of abdominal symptoms should be treated with usual emergency measures. Close monitoring is important, because the abdominal symptoms may indicate hemorrhage of the tumor, which could be a result of the excretion of vast amounts of catecholamines.

- In patients with a composite pheochromocytoma that is also secreting vasoactive intestinal polypeptide can present with acute and severe sepsis-like symptoms, resulting in hypotension, acidosis, and hypeension. Rarely, a pheochromocytoma manifests with the clinical presentation of acute renal failure.

- Patients often have pulmonary edema, sometimes necessitating ventilation, and acute (aracnic) renal failure requiring hemodialysis. Some patients also have DIC.

- Generalized seizures can also occur as a result of cerebral ischemia caused by vasospasm of the cerebral circulation to high levels of circulating catecholamines and may be related to the clinical presentation of the tumor. In young patients with cerebral hemorrhage without an apparent cause, pheochromocytoma should be suspected. Rarely, neurologic symptoms such as paresis occur due to spinal cord compression by metastases.

- Even though multisystem failure is a rare presentation of pheochromocytoma which is characterized by a hypothermic state, often related to a tumor is due to shivering. Similarly, patients may experience tachycardia, diastolic dysfunction, diffuse edema (heart), peripheral vasoconstriction and hypertension, vasospasm and renal ischemia.

- Patients often have pulmonary edema, sometimes necessitating ventilation, and acute (aracnic) renal failure requiring hemodialysis. Some patients also have DIC.

- Phenoxybenzamine is the drug of choice for alpha-adrenoceptor blockade. It is usually given in a single daily dose for at least 2 weeks before surgery.

- Adequate alpha-receptor blockade will be achieved within 10 to 14 days.

- In addition to the previously discussed changes in heart rate and rhythm, hypercathexemia can also cause sterile myocarditis and cardiomyopathy.

- Catecholamine-induced myocarditis and cardiomyopathy

- Myocardial ischemia and myocardial infarction

- Shock and hypotension

- Patients may experience hypertension in different ways. Some report severe headaches and may be preceded by a paroxysm of hypertension. A few patients have been described in whom severe hypotension or shock occurred after treatment with imipramine, metoclopramide, or dopamine.

- Hypertension may be accompanied by syncope and may be episodic. In less than 2% of patients, profound shocks is the presenting manifestation. In these patients, shock is accompanied by significant abdominal pain, signs consistent with peritoneal, tense, widespread, deep, hyperactive, and ileus.

- The mechanisms that lead to hypertension and shock in patients with pheochromocytoma are not understood.

- In patients, severe hypotension occurs in the postoperative period followings a solution of pheochromocytoma. This hypotension is thought to be the result of the sudden depletion of circulating catecholamines in the continuing presence of alpha-adrenoceptor blockade and can be treated by fluid replacement and rarely by intravenous urokinase or vasoactive drugs.