severe hypertension, tachyarrhythmias, and hypotension. The first two are caused by excessive release of catecholamines during manipulation of the tumor, and the latter results from catecholamine withdrawal and hypovolemic shock.

Preoperative medication to inhibit the effects of catecholamines is begun 1 to 3 weeks before surgery to prevent these complications. The major group of drugs used is the α-adrenergic blocking agents. To control catecholamine release when α-adrenergic blocking agents are inadequate, the child is given β-adrenergic blocking agents.

Success of therapy is judged by lowering of blood pressure to normal, absence of hypertensive attacks (flushing or blanching, fainting, headache, palpitations, tachycardia, nausea and vomiting, profuse sweating), heat tolerance, a decrease in perspiration, and disappearance of hyperglycemia. The disadvantage of these drugs is their inability to block the effects of catecholamines on beta receptors.

Nursing Care Management

Children with hypertension and hypertensive attacks should be assessed for pheochromocytoma. Because of behavioral changes (nervousness, excitability, overactivity, and even psychosis), increased cardiac and respiratory activity may appear to be related to an acute anxiety attack. Therefore, a careful history of the onset of symptoms and association with stressful events is helpful in distinguishing between an organic and a psychological cause for the symptoms.

Preoperative nursing care involves frequent monitoring of vital signs and observation for evidence of hypertensive attacks and congestive heart failure. Therapeutic effects are evidenced by normal vital signs and absence of glycosuria. Daily blood glucose levels, urine acetone, and any signs of hyperglycemia are noted and reported immediately.

Nursing Alert

Do not palpate the mass. Preoperative palpation of the mass releases catecholamines, which can stimulate severe hypertension and tachyarrhythmias.