

P. Labetalol (Trandate®, Normodyne®)

I. Classification

- Antihypertensive Agent

II. Actions

- Adrenergic receptor blocking agent possessing both alpha and beta-receptor blocking activity. Its action on beta-receptors is 4 times stronger than that on alpha-receptors. It antagonizes beta 1- and beta 2-receptors equally.
- The mechanism of the antihypertensive action of labetalol has not been fully established. It is considered that labetalol lowers blood pressure by partially blocking the alpha-adrenoceptors in the peripheral arterioles, thus causing vasodilation and a resulting reduction of peripheral resistance. At the same time, blockade of the beta-adrenoceptors in the myocardium prevents reflex tachycardia and subsequent elevation of cardiac output.

III. Indications

- For the emergency treatment of hypertensive emergencies.

IV. Contraindications/Cautions

- Uncontrolled congestive heart failure
- Asthma or a history of obstructive airway disease
- Greater than first degree AV block
- Cardiogenic shock and states of hypoperfusion
- Sinus bradycardia
- Known sensitivity to labetalol

V. Adverse Effects

A. CNS

- Signs of cerebral hypoperfusion may occur if blood pressure is reduced too rapidly. Signs include confusion, somnolence, light headedness, dizziness, nausea, vomiting, pallor, sweating, blurred vision, headache, hallucinations and loss of consciousness
- Fatigue, malaise

B. Cardiovascular

- Bradycardia, Severe postural hypotension, Angina pectoris

C. Respiratory

- Bronchospasm, dyspnea

D. Other

- Jaundice, Nausea / Vomiting
- Drug rash, paresthesia (especially “scalp tingling”), pruritus and angioedema

VI. Administration

A. Adult

- 10 - 20 mg slow IVP over 2 minutes

VII. Onset/Duration

- Onset 5 - 10 minutes