Thyroid hormones enhance oxygen consumption by most tissues of the body and increase cardiac contractility. Thus, thyroid hormones exert a profound effect on the rates of synthesis and utilization of myocardial high-energy compounds.

L-thyroxine (T4) is the prohormone from which the biologically active thyroid hormones are formed. Each mL of Triostat (liothyronine sodium injection) (T3) contains liothyronine sodium, which is the sodium salt of T3. The structural and empirical formulas and molecular weight of each molecule is shown below.

The structural and empirical formulas and molecular weight of T4 are shown below.

The structural and empirical formulas and molecular weight of T3 are shown below.


PRECAUTIONS

When thyroid-replacement therapy is administered, the patient's body mass must be carefully monitored, and therapeutic measures directed at these concomitant endocrine abnormalities may need to be added, maintained or decreased to achieve a balance in the patient's physiology and well-being.

Thyroid hormones should be used with great caution in a number of clinical situations. These include patients with known or suspected cardiovascular disease, in conjunction with careful cardiac monitoring. Although the specific effects of thyroid hormones on cardiovascular function and structure are controversial, an increase in cardiac output and cardiac contractility, and a decrease in peripheral vascular resistance, have been documented. Thyroid hormones also increase heart rate, ventricular contractility and cardiac output. In patients with angina pectoris or the elderly, in whom there is a high risk of increasing myocardial oxygen demand, use thyroid hormones with great caution. Use thyroid hormones with extreme caution in patients with compromised cardiac function. In patients with known or suspected cardiovascular disease, the prohormone T4 must be converted to T3 in the body before it can exert biological effects. During periods of illness or stress, this conversion may be slowed or inhibited. In such situations, additional or increased adrenocortical hormone replacement, and possibly diuretics, may be required to prevent acute adrenocortical insufficiency or decompensation.

Thyroid hormones exert a profound effect on carbohydrate metabolism, increasing the basal metabolic rate, as well as the number and activity of peripheral glucose transporters. This effect on carbohydrate metabolism may be exaggerated in patients with known or suspected diabetes mellitus. The use of thyroid hormones in the therapy of obesity, alone or in conjunction with other therapeutic agents, has been used for the treatment of obesity.

Infection is often present in myxedema coma and should be looked for and treated as indicated. Use of thyroid hormones in the therapy of myxedema coma is associated with a high mortality rate. Infection should be treated vigorously and thyroid hormone replacement therapy should be delayed until after infection is controlled.

DOSAGE AND ADMINISTRATION

Triostat (liothyronine sodium injection) (T3) contains liothyronine sodium, in sterile non-pyrogenic water for injection. Each mL of Triostat in amber-glass vials contains, in sterile non-pyrogenic water for injection: L-tyrosine, 0-(4-hydroxy-3-iodophenyl)-3,5-diiodo-, monosodium salt, 100 mg; Triostat (liothyronine sodium injection) (T3) contains liothyronine sodium, in sterile non-pyrogenic water for injection. Each mL of Triostat in amber-glass vials contains, in sterile non-pyrogenic water for injection: L-tyrosine, 0-(4-hydroxy-3-iodophenyl)-3,5-diiodo-, monosodium salt, 100 mg.

Each mL of Triostat in amber-glass vials contains, in sterile non-pyrogenic water for injection: L-tyrosine, 0-(4-hydroxy-3-iodophenyl)-3,5-diiodo-, monosodium salt, 100 mg.
Triostat

Pediatric Use

should be taken in dose selection, and it may be useful to monitor patients are more likely to have decreased renal function, care greater in patients with impaired renal function. Because elderly by the kidney, and the risk of toxic reactions to this drug may be hepatic, renal, or cardiac function, and of concomitant disease or the elderly and younger patients. In general, dose selection for an experience has not identified differences in responses between

However, caution should be exercised when thyroid hormones are milk. Thyroid hormones are not associated with serious adverse

Pregnancy

treatment of established indications should not discontinue therapy. Carcinogenesis, Mutagenesis and Impairment of Fertility

ADVERSE REACTIONS

The most frequently reported adverse events were arrhythmia (6% of patients) and tachycardia (3%). Cardiopulmonary arrest, hypertension, and other cardiovascular events. Review of the myxedema case reports between thyroid hormones and digitalis and vasopressors. Thyroid hormones increase the adrenergic effect also be enhanced.

Adults

DOSAGE AND ADMINISTRATION

hypoglycemia or fluid loss should be instituted if needed. Antagonists have been used advantageously in the treatment be indicated if congestive heart failure develops. Beta-adrenergic administered and ventilation maintained. Cardiac glycosides may

Treatment of Overdosage:

tremor, sweating, increased bowel motility and menstrual

REACTIONS, contact Par Pharmaceutical at 1-800-828-9393 or

For medical advice about adverse reactions contact your

liothyronine sodium tablets.

Laboratory Tests

subcutaneously. It should not be given intramuscularly or administration only. Simultaneous glucocorticosteroids are required.

• There is limited clinical experience with intravenous liothyronine

When switching a patient to liothyronine sodium tablets from has been stabilized and the patient is able to take oral medication. Oral therapy should be resumed as soon as the clinical situation

Safety and effectiveness in pediatric patients have not been

in the pediatric population.

PRECAUTIONS–Drug Interactions

an initial dose of 10 mcg to 20 mcg is
cardiovascular disease, an initial dose of 10 mcg to 20 mcg is
coma/precoma in adults. In patients with known or suspected

An initial intravenous
dose ranging from 25 mcg to

Beecham Pharmaceuticals since 1963 and from scientific literature

following dosing guidelines have been derived from data analysis

and increase gradually according to the patient's response.

between thyroid hormones and digitalis and vasopressors.

Therefore, use caution when administering vasopressors

hormone preparations may increase the risk of precipitating

Therefore, use of vasopressors in patients receiving thyroid

of catecholamines such as epinephrine and norepinephrine.

Thyroid hormones increase the adrenergic effect also be enhanced.

Estrogen, Oral Contraceptives:

Insulin or Oral Hypoglycemics:

If a patient is truly hypothyroid, it is likely that a reduction in

anticoagulants are also being given, compensatory increases

should be monitored to assess dosage adequacy and biologic

appearance of anticoagulant effectiveness.

To report SUSPECTED ADVERSE