IN BRIEF

Propylthiouracil for Hyperthyroidism

The thionamides propylthiouracil and methimazole are both used to treat hyperthyroidism. Propylthiouracil causes severe hepatic toxicity or hepatic failure in about 0.1% of adults and children. It is the third leading cause of liver transplants due to drug toxicity (acetaminophen and isoniazid are the first two). Methimazole may cause less serious hepatic toxicity; reversible cholestatic jaundice has been reported. There is generally no good reason to continue to use propylthiouracil, with 2 possible exceptions. First, propylthiouracil may be preferred for treatment of life-threatening thyroid storm because it inhibits conversion of T4 to T3, while methimazole does not. Second, propylthiouracil may be preferable for use in pregnancy because use of methimazole has rarely been associated with aplasia cutis and with choanal and esophageal atresia.
