Review Article and Clinical Experience: THYROID STORM: A LIFE-THREATENING THYROTOXICOSIS Therapeutic Clinical Experiences with Formula TS 41668-24-6

Abstrak:

Thyroid Crisis (TC) or Thyroid Storm (TS) is an acute, life-threatening, thyroid hormones-induced hypermetabolic state involving multiple systems in patients with thyrotoxicosis or those who are previously unrecognized thyrotoxicosis. The Burch-Wartofsky-Point Score (BWPS) has been widely used in Surabaya as a device of diagnostic criteria for TS. Formula TS 41668-24-6 has been used as specific practical guideline in the treatment of TS and its therapeutic clinical outcomes. The description of this Formula can be followed below. "4" means: 400 mg loading dose of PTU, with maintenance dose: 100-200 mg PTU every 4 hours. PTU is given to inhibit TH synthesis and to inhibit the conversion of T4 to T3. Alternatively, methimazole: 40 mg as a loading dose can be given, with maintenance dose 10 mg every 4 hours. "1" means: PTU should be administered at least 1 hour before giving iodine to establish blockade of hormone synthesis. The first "6" means: 6 drops of Lugol's solution or SSKI every 6 hours to inhibit TH release from thyroid gland and should be evaluated after 6 days. The second "6" means: administration 10-40 mg propanolol every 6 hours to decrease heart rate, myocardial contractility, blood pressure, and myocardial oxygen demand. Reevaluation of propanolol administration should be done after 6 days. "8" means: 100-200 mg IV hydrocortisone hemisuccinate every 8 hours to block the conversion of T4 to T3. Stress dose are required to replace accelerated production and degradation of cortisol induced by TH. "24" means: with adequate thyroid-suppressive therapy and sympathetic blockade, clinical improvement should occur within 24 hours. The last "6" means: adequate therapy should resolve the TS within 6 days.

Keyword:

Daftar Pustaka:

Burch, HB & Wartofsky, L Life-threatening thyrotoxicosis: Thyroid Storm Endocrinol Metab Clin North Amer 1993 -
Ghobrial, MW & Ruby, EB Come and thyroid storm in apathetic thyrotoxicosis South Med J 2002 -