REFRACTORY HYPORTHYROIDISM: CASE REPORT

(REFRAKTORNA HIPOTIREOZA: PRIKAZ SLUČAJA)

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ABSTRACT: Introduction: Refractory primary hyperthyroidism is a clinical condition that should be considered in patients with persistent biochemical and/or clinical evidence of hypothyroidism: elevated level of TSH above upper limit of 4,5 mIU/L following 6 week interval after the dose was last increased and/or persistent symptoms of hypothyroidism , with usage of high doses of levothyroxine beyond 1,9ug/kg per day. Case report: We report a case of 49 years old female patient with primary hypothyroidism, diagnosed in 2008 as Hashimoto thyroiditis, with elevated ATPO. Beside the progressive elevation of doses of levothyroxine, patient has had a constant elevated levels of TSH during past medical history. She comes to our clinic with persistent symptoms of hypothyroidism and TSH above upper normal limit. At the time she was receiving 350mcg of levothyroxine per os. Patient complained of fatigue, impaired everyday functioning, weight gain, periorbital, upper and lower limbs oedema, memory loss. Since the TSH was 62,98mIU/ml and fT4 5,75pmol/L, with such high dose of levothyroxine replacement, an indication of further analysis of malabsorption was made. After exclusion of common causes (incorrect administration or medication that interfere with absorption), a loading test with levothyroxine was done to exclude pseudomalbsorption. The test was positive, but with delayed peak of fT4 at 4 th hour of the test, so further analyses of maldigestion of levothyroxine were indicated. Urea breath test was positive confirming Helicobacter Pylori active infection .After one course of triple therapy for Helicobacter Pylori for the first time patient had control TSH of 6mIU/ml after 3 months , but still on high dose of levothyroxine of 300mcg .Since genetic analysis for lactose intolerance came in positive and patient was put on lactose low diet and lactose free preparation of L-T4, we are hoping of lowering the dose on consequent control exam. Conclusion: The common approach to management of patients with refractory hypothyroidism in ambulatory setting is elevation of the dose until TSH reaches normal level. This exposes patients to prolonged supratherapeutic doses of levothyroxine, which have been associated with potential complications such as iatrogenic hyperthyroidism and cardiac failure. Therefore, physicians should rule out non-compliance and pursue a further evaluation to identify etiologies for increased requirements or decreased absorption of levothyroxine.

SAŽETAK: Uvod: Refraktorni primarni hipertireoza je kliničko stanje koje treba uzeti u obzir kod pacijenata sa upornim biohemijskim i/ili kliničkim dokazima hipotireoze: povišen nivo TSH iznad gornje granice od 4,5 mIU/L u intervalu od 6 nedelja nakon poslednjeg povećanja doze i/ ili uporni simptomi hipotireoze, uz upotrebu visokih doza levotiroksina iznad 1,9 ug/kg dnevno. Prikaz slučaja: Izvještavamo o slučaju 49-godišnje pacijentkinje sa primarnim hipotireozom, dijagnosticiranom 2008. godine kao Hashimoto tireoiditis, sa povišenim ATPO. Pored progresivnog povećanja doze levotiroksina, pacijent je imao konstantno povišene nivoe TSH tokom prethodne

medicinske istorije. U našu kliniku dolazi sa upornim simptomima hipotireoze i TSH iznad gornje granice normale. U to vrijeme je primala 350 mcg levotiroksina per os. Pacijent se žalio na umor, otežano svakodnevno funkcionisanje, povećanje tjelesne težine, periorbitalni, edem gornjih i donjih ekstremiteta, gubitak pamćenja. Budući da je TSH bio 62,98mIU/ml, a fT4 5,75pmol/L, uz tako visoku dozu zamjene levotiroksina, napravljena je indikacija za dalju analizu malapsorpcije. Nakon isključenja uobičajenih uzroka (nepravilna primjena ili lijekovi koji ometaju apsorpciju), urađen je test opterećenja levotiroksinom kako bi se isključila pseudomalbsorpcija. Test je bio pozitivan, ali sa odgođenim pikom fT4 na 4. sat testa, pa su indicirane daljnje analize maldigestije levotiroksina. Urea test disanja je bio pozitivan što potvrđuje aktivnu infekciju Helicobacter Pylori. Nakon jednog kursa trostruke terapije za Helicobacter Pylori, pacijent je po prvi put imao kontrolu TSH od 6mIU/ml nakon 3 mjeseca, ali i dalje na visokoj dozi levotiroksina od 300mcg.Od genetske analize za intolerancija na laktozu je bila pozitivna i pacijent je stavljen na dijetu sa malo laktoze i preparat L-T4 bez laktoze, nadamo se smanjenju doze na naknadnom kontrolnom pregledu. Zaključak: Uobičajeni pristup liječenju pacijenata sa refraktornom hipotireozom u ambulantnim uvjetima je podizanje doze dok TSH ne dostigne normalan nivo. Ovo izlaže pacijente produženim supraterapijskim dozama levotiroksina, koje su povezane s potencijalnim komplikacijama kao što su jatrogeni hipertireoidizam i zatajenje srca. Stoga bi liječnici trebali isključiti neusklađenost i nastaviti s daljom evaluacijom kako bi se identificirale etiologije za povećane potrebe ili smanjenu apsorpciju levotiroksina.