



Oral Manifestation for Patients with Thyroid Dysfunction and its Management in Dental Clinic -A Review

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[Review Article](#)

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ABSTRACT

Aim: Review the most important management of thyroid gland dysfunction. The thyroid is the most important gland is a bilobular structure located on both sides of the trachea. Thyroid functions disturbance most the second common of the endocrine system disorder, it's increased among women it about 5% of the population women have thyroid dysfunction, and about 6% can clinically be detected of the thyroid nodules by palpation.

Conclusion: The dentist determined thyroid dysfunction and avoid dental complications result in a dental clinic by taking information also take care about cardiovascular statuses due to some patients suffer atrial fibrillation with anticoagulation therapy, that made need antibiotic prophylaxis before treated. The hypothyroidism Patients sensitive to barbiturates and central nervous system depressants so the drug used for medications very little. The dentist must be given fluoride as a drug as a treatment for hyperthyroidism patients due to the fluoride act to reduce thyroid activity by its ability to mimic the action of thyrotropin (TSH). fluoride linked to thyroid problems. A patient must avoid the effect of fluoride on their thyroid can utilize from fluoride-free Toothpaste like CariFree, an oral neutralizer gel.

Keywords: Oral, Thyroid, Dysfunction, Management, Dental, Clinic.

Introduction: The thyroid is the most important gland is a bilobular structure located on both sides of the trachea. Thyroid functions disturbance most the second common of the endocrine system disorder, it's increased among women.[1]it about5% of the population women have thyroid dysfunction,[2,3] and about 6% can clinically be detected of the thyroid nodules by palpation.[4] 15% of the people have abnormal thyroid anatomy on physical examination, without complete a diagnostic evaluation. Also, many people affected by undetected cases.[2] that means this case with hypothyroidism or



hyperthyroidism undiagnosed can be seen in the dental clinic.[4] The American Thyroid Association's Guidelines suggested take for screening model for the patients that help for the detection of Thyroid Dysfunction[5-8], the level screen starting at 35 years and it every 5 years made, and the patients have a serum thyroid-stimulating hormone exanimete also regardless of gender.

The family history record and the risk factor for thyroid dysfunction like diabetes mellitus, pernicious anemia, history for surgery, intake of iodine-containing medications, radiation to the head and neck region or familiar history for thyroid disease autoimmune disease.[8]

The screening started for the thyroid by examination of the head and neck, the thyroid gland examinant by the patient's head must be extended to one side. The examiner palpated the gland by both hands using the fingers then asked from the patient to swallow, to evaluate the anatomical extent of the lobules by using the last three fingers of one hand with a note the right lobule is larger than the left, in healthy patients can't observe the gland on relaxation.

The Oral Manifestations for the Hypothyroidism Patients

The hypothyroidism is decreased in hormone production and function, many reasons may cause hypothyroidism such as Hashimoto's disease, surgery, radioactive iodine, and pharmacological agents. The patients with hypothyroidism suffer from slow metabolic rate, intolerance to cold, lethargy, weight gain, puffiness of the face and eyelids and dry and cool skin also the blood pressure is normal, but the slower in heart rate. The oral manifestation for children characterize by macroglossia, thick of the lips, malocclusion and delayed in the eruption of teeth. The reason for the thick of the lips and macroglossia accumulation of subcutaneous like mucopolysaccharides, glycosaminoglycan which cans decreased in the degradation of these substances.

Also, craniofacial growth and dental development effected with hypothyroidism causes a dissociation of ramus growth and the internal aspect of the ramus failure for normal resorption result in insufficient space for eruption of mandibular second molars that cause impaction of the mandibular second molars[5] anther symptom like delayed wound healing, altered tooth morphology and poor periodontal health,[6]. The dentist determined thyroid dysfunction and avoid dental complications result in a dental clinic by taking information also take care about cardiovascular statuses due to some patients suffer atrial fibrillation with anticoagulation therapy, that made need antibiotic prophylaxis before treated.[11] The hypothyroidism Patients sensitive to barbiturates and central nervous system depressants so the drug used for medications very little. [6,12].

The Oral Manifestations for the Hyperthyroidism Patients

The hyperthyroidism is unregulated increased for thyroid hormone production. The patients with hyperthyroidism suffered from intolerance to heat, weight loss, increased appetite, emotional instability, tremor, increased cardiac output sinus tachycardia, marked chronotropic and ionotropic, systolic heart murmur and hypertension[7]. Also the oral manifestation for these patients is increased exposed to caries and periodontal disease, osteoporosis in maxillary or mandibular, enlargement occur in extraglandular thyroid tissue (lateral posterior tongue), the dental eruption accelerated [8]. The hyperthyroidism patients suffer burning pain in the mouth dry mouth due to Sjogren's syndrome[4] In dental clinic hyperthyroidism patients suffer from stress, anxiety and the Epinephrine used in local anesthesia is contraindicated, so that need used local anesthesia without Epinephrin.[17] The dentist must be given fluoride as a drug as a treatment for hyperthyroidism patients due to the fluoride act to



reduce thyroid activity by its ability to mimic the action of thyrotropin (TSH). fluoride linked to thyroid problems. A patient must avoid the effect of fluoride on their thyroid can utilize from fluoride-free toothpaste like Carifree, an oral neutralizer gel.[18]

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