

Hasan Hatipoglu<sup>1</sup>, Faik Yaylak<sup>2</sup>, Mujgan Gungor Hatipoglu<sup>3</sup>

# Primarnu dijagnozu anaplastičnog karcinoma štitnjače postavio je stomatolog: prikaz slučaja

## *Primary Diagnosis of an Anaplastic Thyroid Carcinoma by the Dentist: Case Report*

<sup>1</sup> Dental Clinic/Periodontology, Main Campus, Dumlupinar University, Research and Training Hospital  
Klinika za parodontologiju, Dumlupinar University, Istraživačka i klinička bolnica

<sup>2</sup> Dept.of General Surgery, Main Campus, Dumlupinar University, Research and Training Hospital  
Zavod za opću kirurgiju Sveučilišta u Dumlupinaru, Istraživačka i klinička bolnica

<sup>3</sup> Dental Clinic/Oral Diagnosis and Radiology, Main Campus, Dumlupinar University, Research and Training Hospital  
Stomatološka klinika, Oralna dijagnostika, Sveučilište Dumlupınar, Istraživačka i klinička bolnica

### Sažetak

Za primarnu procjenu i vođenje slučaja u stomatološkim ordinacijama najvažnija je detaljna sustavna anamneza te ekstra/intraoralni pregled pacijenata s bilo kakvom cervicalnom i facijalnom patologijom. Taj je pristup ključan u inicijalnoj procjeni i zbrinjavanju bolesnika s nekoliko kliničkih stanja u cervicalnoj regiji koja se često mogu primarno dijagnosticirati kod stomatologa. Na taj se način sprječavaju nepotrebne terapijske intervencije u klinikama. U ovom prikazu opisujemo slučaj 85-godišnjakinje kojoj je u našoj klinici postavljena dijagnoza anaplastičnog karcinoma štitne žlijezde nakon inicijalne procjene zbog bola u srednjem dijelu mandibularne regije. Povijest bolesti bila je bez osobitosti, osim zabilježene hipertenzije. Tijekom temeljitoga intraoralnog pregleda nije uočena nikakva patologija koja bi objasnila bolove. Maksila je bila bezuba. Ekstraoralnim pregledom otkrivena je cervicalna asimetrija nastala zbog neprepoznate mase u lijevom lobusu štitnjače, zajedno s oteklinom lijevoga inferiornog cervicalnog limfnog čvora. Nije bila planirana nikakva stomatološka terapijska intervencija u ordinaciji. Nakon dijagnostičke obrade pacijentica je bila podvrgnuta operaciji totalne tiroidektomije, bez cervicalne disekcije. Histopatološkom diferencijacijom bio je potvrđen anaplastični karcinom štitnjače. Slučaj je zanimljiv zato što podsjeća na to koliko je važno imati detaljnu sustavnu anamnezu i obaviti ekstra-/intraoralni pregled tijekom inicijalne procjene pacijenata u stomatološkoj ordinaciji, što se ne bi smjelo zanemarivati ako se u klinikama žele izbjegći nepotrebne intervencije.

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### Adresa za dopisivanje

Dr. Hasan Hatipoglu  
Dumlupinar University,  
Research and Training Hospital  
Dental Clinic/Periodontology  
Main Campus, Tavsanli  
43270 Kutahya  
Turkey  
perio.hasan@gmail.com

### Ključne riječi

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### Uvod

Za primarnu procjenu i vođenje slučaja pacijenata u stomatološkim ordinacijama najvažniji su detaljna sustavna anamneza i temeljni ekstra-/intraoralni pregled. Takav sustavni pristup mogao bi pomoći stomatologu da prepozna pacijente kojima je potrebna preporuka i odlazak specijalistu na daljnje ispitivanje prije bilo kakvih stomatoloških zahvata.

### Introduction

A thorough/systematic medical history taking and extra-/intraoral examination in the dental clinics is crucial in the primary evaluation of the patients. This systemic approach may help the dentist to identify some patients who need referral and further investigation before the performance of any dental treatments.

Poznato je da određena patološka stanja često dijagnosticira stomatolog, poput virusnih i bakterijskih infekcija, raka (limfom, leukemija, itd.), metastatskih bolesti glave te facijalne i vratne regije. Postoje i rijetka klinička stanja, poput anaplastičnog karcinoma štitne žlijezde, čiju primarnu dijagnozu možemo postaviti u stomatološkoj ordinaciji. Osim toga, intraoralni pregled može kod nekih kliničkih stanja biti ključan u diferencijalnom dijagnosticiranju pacijenata oboljelih od čestih sustavnih bolesti koje uključuju oralnu sluznicu, jezik, gingivu, denticiju i parodontu (1). Palpacija i pregled mogu pomoći i u detekciji određenih poremećaja štitne žlijezde, poput otekline, čvorova ili tvorbi. Ti poremećaji mogu varirati od jednostavnoga gihta do karcinoma (2). Kada se analiziraju takve situacije, pacijenta treba prije bilo kakvih stomatoloških zahvata poslati na daljnje pretrage, i to ne samo radi potvrde dijagnoze klinički važnog nalaza kao što je rak, nego i prevencije nepotrebnih stomatoloških radova.

Naša je namjera u ovom prikazu predstaviti pacijentu kojoj smo u našoj klinici dijagnosticirali anaplastični karcinom štitnjače te istaknuti važnu zadaću stomatologa u ranoj dijagnozi sustavnih poremećaja.

### Prikaz slučaja

Pacijentica bijele rase u dobi od 85 godina javila se u Stomatološku kliniku sveučilišne bolnice Dumlupinar i žalila se na bolove u sredini mandibularne regije.

Nakon detaljne sustavne anamneze nije bilo osobitosti vezanih za bilo koji sustavni poremećaj, osim hipertenzije. Nije spomenula ništa u vezi s opstrukcijom dišnih puteva, ni promjenu kvalitete glasa. Nije govorila ni o radioterapiji vratne regije. No, ipak se potužila na poteškoće u gutanju. Zato je bio obavljen intraoralni pregled i ustanovljena je normalna alveolarna sluznica i gingiva, osim s lingvalne strane anteriornih zuba mandibule – tamo je uočen gingivitis. Mandibularni zubi dostupni pregledu bili su sljedeći: 35, 34, 33, 32, 31, 41, 42 i 43 (Slika 1.). Kod njihova perkusijskog ispitivanja, u vertikalnom i horizontalnom smjeru nisu se javljali ni bolovi ni osjetljivost. Nakon temeljitog intraoralnog pregleda zaključili smo da ni gingivitis s tvrdim zubnim naslagama, ni mnogobrojni karijesi nisu kod pacijentice bili čimbenici bola.

Panoramske rendgenske snimke otkrile su impaktirani korijen u području lijevog maksilarнog očnjaka te karijes i okluzalnu atriciju na svim man-

Some common pathological conditions such as viral and bacterial infections, cancer (lymphoma, leukemia etc.) and metastatic disease in the head, facial and neck regions are known to be likely primarily diagnosed by a dentist. However, also rare clinical conditions such as an anaplastic carcinoma of the thyroid gland may be diagnosed primarily in the dental clinic. Also, in some clinical conditions intraoral examination may be the keystone of the differential diagnosis of the patients with some common systemic diseases which involves the oral mucosa, tongue, gingival, dentition, and periodontium (1). The palpation and inspection of the head and neck region as apart of the systemic extraoral examination may help to detect some thyroid gland disorders such as gland enlargements, nodules or masses. These disorders may vary from simple goiter to carcinomas (2). In observation of such situations, referral and further investigation should be performed before any dental treatments, not only to diagnose an important clinical finding such as cancer, but also to prevent unnecessary dental treatments.

In this case report, our intention was to present our patient who was diagnosed to have a thyroid anaplastic carcinoma in our dental clinic, and the important role of the dentist in the early diagnose of systemic disorders was also underlined.

### Case report

An 85-year-old Caucasian female patient with a complaint of recently developed pain at the middle mandibular area was referred to our dental clinic in the Dumlupinar University, Research and Training Hospital.

Her thorough/systemic medical history was not specific for any systemic disorder except hypertension. She did not report any symptom due to airway obstruction and change in voice quality. She reported no prior history of radiotherapy to the neck. However, she was complaining for a recently developed difficulty and pain during swallowing. In her intraoral examination a normal alveolar mucosa and gingiva was observed except gingivitis which was noted at the mandibular anterior lingual side. Maxillary jaw was edentulous. On mandibular jaw the teeth 35, 34, 33, 32, 31, 41, 42 and 43 were available (Fig.1). In vertical and horizontal percussion of those teeth, pain or sensitivity were not observed. After thorough intraoral examination, gingivitis/calculus or multiple caries were not considered to be responsible for the patient's pain.

Panoramic radiographic examination revealed an impacted tooth root in the left maxillary canine



**Slika 1.** Intraoralna snimka pacijentove mandibule (tijekom endoskopije)

**Figure 1** Patients intraoral-mandibular view (during endoscopy)



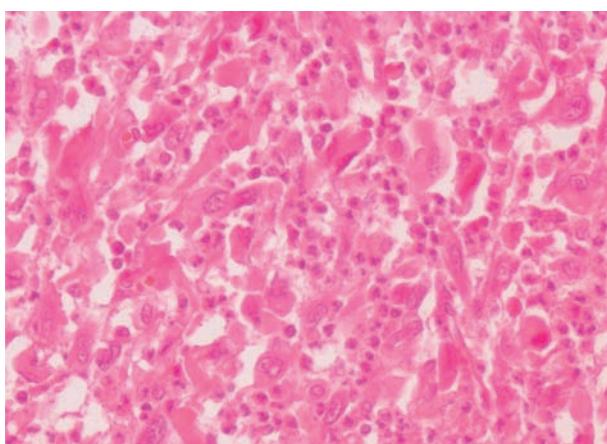
**Slika 2.** Ortopantografska snimka pacijenta

**Figure 2** Panoramic radiographic view of the patient



**Slika 3a i 3b.** Snimke magnetske rezonancije otkrile su tvorbu u lijevom lobusu štitnjače

**Figure 3A and 3B** Magnetic resonance images revealed a mass in the left thyroidal lobe.



**Slika 4.** Snimka mikroskopskog povećanja tkiva anaplastičnog karcinoma štitnjače (obojen hematoksilinom i eozinom, s povećanjem x100).

**Figure 4** Microscopic appearance of anaplastic thyroid carcinoma. (Hematoxylin and eosin stain, x 100)

dibularnim zubima. Također je uočen stanjen kortikalisa na donjem rubu mandibule te opažene grube trabekularne strukture (Slika 2.).

Tijekom ekstraoralnog pregleda nije bilo veće facijalne asimetrije ni deformiteta. Pregledani su bili submandibularni, submentalni i cervicalni limfnici čvorovi. Tada su zapažene otekline lijevog lobusa štitnjače i inferiornog anteriornog cervicalnog limfnog čvora na istoj strani. Palpacijom lijevog lobusa štitnjače otkrivena je čvrsta tvorba promjera 3x4 centimetra s konglomeratom lijevog srednjeg i inferiornog cervicalnog limfnog čvora. Tvorba i konglomerat čvrsto su bili fiksirani uz lijevi sterno-kleidomastoidni mišić. Pregledom je ustanovljen normalan nalaz desnog lobusa štitnjače i limfnih čvorova te strane vrata.

Pacijentica je upućena na kiruršku kliniku iste ustanove kako bi se isključila tiroidna patologija. Postero-anteriornom rendgenskom snimkom potvrđeno je da nema trahealnih opstrukcija. Ultrazvučnim pregledom štitnjače i cervicalnih limfnih struktura otkrivena je bila hipervaskularna heterogenost s lezijom tvorbe u lijevom lobusu štitnjače miješovite ehogenosti. To je potvrđeno magnetskom rezonancijom (Slike 3a i 3b). Pacijentica je imala nejasne obrise prema lobusu štitnjače. Bila je obavljena i gornja endoskopija kako bi se isključio poremećaj jednjaka.

Nakon predoperativne pripreme pacijentica je bila naručena za operaciju tiroidektomije i eksploracije vratne regije. Tada je pronađena tumorska masa s izvorom u lijevom lobusu štitnjače i proširenjem u lijeve anteriorne limfne čvorove. Desni je lobus bio normalan. Procjenom zamrznutoga reza tumorskog tkiva bila je potvrđena dijagnoza anaplastičnog karinoma štitnjače. Nakon toga su disekcijom od tracheje jednostavno odvojene i tvorba i lijevi lobus štitnjače. Cervikalna disekcija činila se nemogućom zbog makroskopske invazije karotidne opne. Kod pacijentice je zato bila obavljena samo totalna tiroidektomija. Histopatološkom diferencijacijom otkriveno su bile nediferencirane stanice raka štitnjače, uz one tipične vrtenaste, poligonalne i gigantske koje često sadržavaju i pločaste epitelne stanice i sarkomatoidne fokuse (Slika 4.). Radioterapija nije bila preporučena – postojale su kontraindikacije zbog nediferenciranosti tumora. Nakon operacije pacijentica je živjela još samo tri mjeseca.

teeth area, caries and occlusal attritions on all mandibular teeth. Decreased cortical bone thickness of the lower border of the mandible and coarsened trabecular structures were also observed (Fig. 2).

During the extraoral examination, facial asymmetry and deformity was not observed. Submandibular, submental and cervical lymph nodes were examined. An asymmetric enlargement of the left thyroidal lobe and left inferior anterior cervical lymph nodes were noted. With palpation of the left thyroidal lobe a firm mass with size of 3x4 cm in diameter with a conglomerate of the left middle and inferior cervical lymph nodes were found. The mass and conglomerate were firmly fixed to the left sternocleidomastoid muscle. Right thyroidal lobe and right sided cervical lymph nodes were found to be normal.

The patient was referred to the general surgery clinic of the institute to rule out possible thyroid pathology. Posterior-anterior x-ray examination revealed no tracheal obstruction. Ultrasonographic examination of the thyroid and cervical lymphatic revealed a hyper vascular, heterogeneity with a mass lesion in the left thyroidal lobe with an extension to a conglomerate of the left middle and inferior cervical lymph nodes with mixed echogenicity. Thyroidal mass was also confirmed with magnetic resonance imaging (Fig. 3A and 3B). The mass did not have a clear margin from the thyroidal lobe. Upper endoscopy was not specific for any obstructive esophageal disorder.

After preoperative preparation the patient was scheduled for thyroidectomy and neck exploration. At exploration a tumoral mass was found, which was originated from the left thyroidal lobe with an extension to the lower anterior cervical lymph nodes. The right lobe was found to be normal. The diagnosis of anaplastic carcinoma of the thyroid gland was confirmed with frozen section evaluation. The mass and left thyroidal lobe was easily dissected from trachea. Cervical dissection was not feasible due to the macroscopic invasion to the carotid sheath. The patient was treated with total thyroidectomy only. Histopathological examination revealed undifferentiated thyroid cancer cells with the presence of typically composed of spindle, polygonal and giant cells often harboring squamous cells and sarkomatoid foci (Fig. 4). Radiotherapy was not indicated due to undifferentiated tumor. Total survival was only three months after the operative treatment.

## Rasprava

Za primarnu procjenu pacijenata u stomatološkim klinikama potrebna je velika sposobnost. Njegove ključne elemente čine standardizirani sustavni pristup, što uključuje detaljnu sustavnu anamnezu i ekstra-/intraoralni pregled. Problemi u oralnoj šupljini nisu ograničeni samo na sluznicu ili na zube, nego to mogu biti i primarni nalazi određenih sustavnih poremećaja. Stomatolog može imati vrlo važnu ulogu u dijagnosticiranju, probiru i multidisciplinarnom zbrinjavanju najvažnijih sustavnih bolesti, poput hematoloških poremećaja (1,3), reumatskih (Sjögrenov sindrom) i onkoloških bolesti (1) te čvrstih tvorbi u lateralnoj regiji vrata (4). Ako prepozna neke od sustavnih tegoba, to stomatologa može prisiliti na prilagodbu predviđenih zahvata dijagnostičke ili terapijske prirode, posebice ako su u pitanju pacijenti s visokim rizikom od krvarenja, infekcije i srčanih poremećaja, ili s rakom, autoimunim bolestima ili transplantiranim organom (5). Takva stanja zahtijevaju medicinska savjetovanja, primjenu profilaktičnih doza antibiotika ili, prema potrebi (5), posebne mjere opreza (osobito kod poremećaja zgrušavanja- suplementi čimbenika koagulacije).

Kako bi preduhitrio negativan ishod, stomatolog treba posvetiti posebnu pozornost nekim simptomima, poput poremećaja na grkljanu, u oralnoj šupljini, na štitnjači i u žlijezdama slinovnicama. Tada mora tražiti dodatne pretrage (6,7) prije nego što nastavi rutinski liječiti pacijenta. Poznato je da su najčešći uzroci oteklina u vratnom području posljedica limfadenitisa zbog virusnih infekcija i bolesti vezanih za virus (tonsillitis i oropharyngitis/parotitis, molluscum contagiosum, infekcije vezane za HIV, infekcije herpesom ili virusima Cytomegalo i Varicella Zoster, infekcije vezane za Epstein-Barr virus, infekcije Humanim Papilloma virusom) (8), zatim Kawasakieva bolest, bakterijske infekcije - kao što su sinusitis i tonsillitis, bolest mačjeg ogreba koju uzrokuje Bartonella henselae - angiomatosis bacillaris, mikobakterijski lymphadenitis, rhinoscleroma, guba, gonoreja, sifilis, actinomycosis, antraks) (8), sindromi zglobne groznice i protozoalne (primjerice toxoplasmosis) te maligne bolesti (9). Ima i nekoliko gljivičnih bolesti koje mogu utjecati na tu regiju (kao što su sinusno-nazalne gljivične bolesti).

Neugodu ili bol u vratu pridruženu čvrstoj tvorbi u lateralnoj regiji vrata trebalo bi smatrati rakom, a tu dijagnozu potvrđujemo pretragama već navedenima u prikazu (4). Kod pacijenata s rakom bol se mo-

## Discussion

A special competence is essential in the primary evaluation of the patients in the dental clinics. A standardized systemic approach, which includes a thorough/systematic medical history taking and systematic extra-/intraoral examination, are the key stones of this competence. The problems observed in the oral cavity are not only limited to the oral mucosa or the teeth, but also may be the primary findings of some systemic disorders. The dentist can play an important role in the diagnosis, screening and multi-disciplinary management of some important systemic illnesses such as hematological disorders (1,3), rheumatologic diseases (like Sjogren's syndrome), oncological disease (1), lumps in the lateral neck region (4). Recognition of some systemic disturbance may force the dentist to modify his dental diagnostic and/or therapeutic interventions for some patients with high risk of bleeding, infections, cardiac problems, cancer, autoimmune diseases or organ transplantation. (5).

The presence of such conditions should be appropriately managed with medical consultations, use of antibiotic prophylaxis or recognizing special requirements (particularly in bleeding disorders-factor supplements) as needed (5).

Especially some common symptoms, which may indicate a possible disorder of the larynx, oral cavity, thyroid and salivary glands merit further investigation (6,7), before a dentist decides to continue routine dental treatment of the patient to prevent adverse outcomes. The most common causes for swelling in the neck are known to be resulted from lymphadenitis due to viral infections and virally related diseases (tonsillitis and oropharyngitis/parotitis, molluscum contagiosum, infections related to HIV, Herpes virus infections, Cytomegalo virus infections, Varicella Zoster virus infections, Epstein-Barr virus related infections, Human Papillomavirus infections) (8), Kawasaki disease, bacterial infections (like bacterial sinusitis and tonsillitis, Cat-Scratch Disease, Bacillary angiomatosis, mycobacterial lymphadenitis, rhinoscleroma, leprosy, gonorrhea, syphilis, actinomycosis, anthrax) (8), glandular fever syndromes, protozoal diseases (like toxoplasmosis), malignancy (9). Otherwise some fungal diseases (like Sinonasal fungal disease) may also affect this region (8).

Discomfort or pain in the neck accompanying a lump in the lateral neck should be considered as cancer otherwise confirmed as in this reported case (4). Pain in cancer patients could be coincidental.

že javiti i slučajno. No, on je pokazatelj rekurencije ili progresije karcinoma. U istraživanju Cuffarija i njegovih suradnika (10) istaknuto je da se bol javlja kao glavni razlog odlaska liječniku kod pacijenata oboljelih od raka u 19,2 posto slučajeva, te da je češći kod muškaraca. Većina oboljelih koji se tuže na bol dok se liječe od karcinoma u orofacialnoj regiji, opisivali su ga u području grla, jezika, usta, zuba i uha. Tumori mogu također izlučivati spojeve poput prostaglandina, citokina i čimbenika rasta. Moramo istaknuti da razvoj raka potiče i upalni odgovor koji se javlja nakon aktivacije stanica upale. Taj lanac smatramo izvorom bola kod pacijenata oboljelih od raka. Pretpostavlja se da je dodatan izvor bola snižena pH vrijednost zbog tkivnih oštećenja i posrednih upalnih promjena. Kod raka je uzrok bola i rast tumorske tvorbe, jer pritiše osjetljive strukture poput krvnih žila, živaca i kostiju (11).

Nekoliko je bolesti čije se dijagnoze postavljaju kod pojave prvih simptoma u području glave i vrata. Kod starijih pacijenata, i onih s mentalnim poremećajima, osobito je teško točno prepoznati sustavni status. Zato je moguće da - kao u opisanom slučaju - ranu detekciju i dijagnostiku bolesti rapidnoga progresivnog tijeka odredi jedino stomatolog nakon detaljnog pregleda regije glave i vrata. Detekcije difuznih oteklina i nodula trebaju predstavljati alarmantne nalaze na temelju kojih stomatolog upućuje pacijenta na daljnje medicinske preglede i pretrage. Neki su autori već spomenuli takav suvremen klinički pristup u stomatološkim klinikama. U svojim tekstovima oni najčešće ističu i podupiru važnu zadaću stomatologa u otkrivanju nedijagnosticirane bolesti štitnjače (12). Izolirane nodule u području štitnjače mogu biti cista, adenom ili karcinom (2).

Rak štitne žljezde suspektan je kod bilo kojeg pacijenta ako se tuži na promuklost, dispneju, disfagiju i bolove u vratu, a prate ih povećanje štitnjače ili pojava nodula. U uznapredovaloj bolesti možemo uočiti sindrom gornje šupljene vene, trahealnu opstrukciju tipa kuglastog ventila, hipertiroidizam te simptome nastale zbog razvoja metastaza (u pluća, kosti i mozak) (13). Nalaz anaplastičnog raka štitne žljezde gotovo da i nije opisan. Samo dva posto svih karcinoma štitnjače su anaplastični (14). Taj oblik vrlo agresivnog raka rapidne progresije javlja se najčešće u petom i šestom desetljeću života oboljelih pacijenata. U dosadašnjim su studijama objavljeni podaci o samo 4 do 10 posto pacijenata mlađih od 50 godina (15, 16). Srednja stopa preživljavanja vrlo je niska - obično manje od jedne godine (petogodišnje preživljavanje zabilježeno je kod 7,1 po-

But it can serve as an indicator of recurrence or progression of cancer. Cuffari et all. (10) have reported pain as an initial complaint in oral cancer patients as 19.2 % to be more prevalent in men. The most patients with pain complaints for orofacial region cancer have described pain in the region throat, tongue, mouth, teeth and ear. Tumors may secrete some materials like prostaglandins, cytokines and growth factors. Also, an inflammatory response with activation of inflammatory cells are triggered with the development of cancer. These events have been considered as the source of pain in cancer patients. As another pain source, a decreased pH due to tissue injury and inflammatory changes, which work with collaboration with the inflammatory mediators, have been advocated. Another source of pain in cancer is the growth from tumor mass and the compression of sensitive structures like vessels, nerves and bone which causes pain (11).

Several diseases are commonly diagnosed with the occurrence of the first symptoms in head and neck region. Especially for the elderly and some patients with mental and psychiatric disorders, it may be difficult for the patient to recognize his/her systemic status exactly. Therefore, like in the case we have presented above, early detecting and diagnosing in rapidly progressive diseases can be only available with a careful and systemic examination of the head and neck region by the dentist. Detecting diffuse enlargements and nodules should be alarming findings for the dentist to refer the patient for further medical examination and investigation. This important *state-of-art* clinical approach in the dental clinics was also mentioned previously by some authors. Commonly, these previous reports have advocated the important role of the oral health care professional in the screening of the dental patients for undiagnosed thyroid disease (12). Especially isolated nodules in the thyroid region could be a cyst, adenoma or carcinoma (2).

Thyroid cancer should be looked for any patients with the complaints such as hoarseness, dyspnea, dysphagia and cervical pain accompanying a thyroidal enlargement or nodule. Superior vena cava syndrome, ball-valve tracheal obstruction, hyperthyroidism, and symptoms due to the metastasis (lung, bone and brain) may be observed in advanced disease (13). Anaplastic carcinoma of thyroid gland has been reported to be rare. Only less than 2 % of all thyroid carcinomas are anaplastic thyroid carcinoma (14). This rapid progressive and highly aggressive type carcinoma is known to be most com-

sto bolesnika, s prosječnim trajanjem preživljavanja od  $7,2 \pm 10$  mjeseci). Kad je riječ o mlađim pacijentima, opisano je dugotrajnije preživljavanje (dulje od 24 mjeseca) (15,17). Ključni pregledi dijagnostičke obrade suspektnih pacijenata uključuju određivanje razine tiroidnog stimulirajućeg hormona (TSH-a), pregled ultrazvukom s kolor-dopplerom i FNA citološku obradu štitnjače (aspiracija tankom iglom) (18). Kirurzi često obavljaju primarnu resekciju, a traheotomija je uobičajena kako bi se osigurala prohodnost dišnih puteva bolesnika kod kojih postoji velika opasnost od njihove opstrukcije. Ima i nekih opisa koji donekle obećavaju - riječ je o radijaciji eksternim snopom u kombinaciji s kemoterapijom. No, taj se način ipak nije pokazao učinkovitim (19). S terminalnim pacijentima treba razgovarati o općenitoj skrbi i prehrambenim suplementima.

U opisanom je slučaju nužno istaknuti i zaključiti da je iznimno važno uzeti detaljnju anamnezu i obaviti temeljit pregled prije bilo kakvih stomatoloških zahvata. Ako su nalazi suspektni, preporučuje se suradnja medicinskih i stomatoloških ekipa.

mon in the fifth and sixth decades of life. Previous studies have reported that only 4 to 10% of the patients were younger than 50-years old (15, 16). The mean survival rate has been reported to be extremely low. Mean survival period has been reported to be lower than one year (5-year survival rate of 7.1% and a mean survival period of  $7.2 \pm 10$  months). Also, younger patients have been reported to be the long-term (more than 24 months) survivors (15, 17). Thyroid stimulating hormone (TSH), ultrasonography with color Doppler examination and thyroid FNA (fine needle aspiration) cytology are the keystones of the primary diagnostic workup (18). Primary resection is commonly performed by the surgeons, and tracheostomy should be performed to secure the airway in some selected patient with high risk of airway obstruction. Limited but promising reports are available with external beam radiation combined with chemotherapy. However, this modality has not shown to be effective (19). General care and nutritional supplementation therapy should be discussed for the terminal patients.

As a conclusion, this case stressed the importance of taking a careful medical history and dental examination before any dental treatments. Collaboration between medical and dental professionals is recommended in the cases with suspicious findings.

### **Abstract**

A thorough/systematic medical history taking and extra-/intraoral examination is essential in the primary evaluation and in the management of the patients with any neck and facial pathology in the dental clinics. This approach is crucial in the initial evaluation and the management of the patients with several clinical conditions which may be frequently diagnosed primarily by the dentist in the neck and prevent unnecessary therapeutic interventions in the dental clinics. In this case report, an 85 years old female, who was primarily diagnosed with anaplastic carcinoma of the thyroid gland after initial evaluation for pain in the middle mandibular region in our dental clinic, was presented. Medical history was not specific except hypertension. In thorough intraoral examination no pathology was observed to explain the pain. Maxillary jaw was edentulous. In extra oral examination cervical asymmetry due to an unrecognized mass in the left thyroidal lobe with the enlargement of the left inferior cervical lymph nodes was noted. No dental therapeutic intervention was planned in the dental clinic. After diagnostic workup the patient was treated with total thyroidectomy without cervical dissection. Anaplastic thyroid carcinoma was confirmed with histopathological examination. This case was interesting to recall the importance of the thorough/systemic medical history taking and extra-/intraoral examination in the initial evaluation of the patients in the dental clinic, which should not be ignored to prevent unnecessary interventions in the dental clinics.

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### **Address for correspondence**

Dr. Hasan Hatipoglu  
Dumlupınar University,  
Research and Training Hospital  
Dental Clinic/Periodontology,  
Main Campus, Tavşanlı,  
43270 Kutahya  
Turkey  
perio.hasan@gmail.com

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