

Türkiye’de Uykuda Solunum Bozuklukları Alanında Yapılan Çalışmalar

Studies Related to the Sleep Disordered Breathing in Turkey

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ÖZET

Ülkemizde uyku tıbbı son 30 yıl içinde gelişmeye başlamış ve oldukça hızlı yol almıştır. İlk uyku laboratuvarı 1986-87 yıllarında Cerrahpaşa Tıp Fakültesi ve Gülhane Askeri Tıp Akademisi bünyesinde kurulmuş, takip eden yıllarda tüm Türkiye’de yaygınlaşmıştır. Uyku laboratuvarlarındaki bu artışa paralel olarak bu alanda üretilen yayınlar da katlanarak artış göstermiştir. Bu çalışmada uykuda solunum bozuklukları konusunda ülkemizde yapılan yayınlar gözden geçirilmiş ve bazı istatistikî saptamalarda bulunulmaya çalışılmıştır.

Anahtar Kelimeler: Hipoventilasyon, uyku apne, uykuda solunum bozukluğu, Türkiye

SUMMARY

In Turkey, sleep medicine began to develop in the last 30 years and has an extremely fast way. The first sleep laboratories were established at Cerrahpaşa Faculty of Medicine and Gülhane Military Medical Academy at 1986-87 years and in subsequent years has spread all over Turkey. In parallel to this increase in sleep laboratories, studies published in this area has increased exponentially. In this study, we reviewed manuscripts, related to the sleep disordered breathing, published from Turkey and tried to do some statistical determinations.

Key Words: Hypoventilation, sleep apnea, sleep disordered breathing, Turkey

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GİRİŞ

Ülkemizde uyku tıbbi konusuna son 30 yıl içerisinde ilgi duyulmaya başlanmış ve bu alanda ilk adımlar Amerika Birleşik Devletleri’nde (ABD) Prof. Dr. İsmet Karacan’ın yanında eğitim gördükten sonra ülkemize dönen Prof. Dr. Erbil Gözükırmızı ve Prof. Dr. Hamdullah Aydın tarafından atılmıştır⁽¹⁾. Bu kapsamda ilk uyku laboratuvarı 1986 yılında Cerrahpaşa Tıp Fakültesi Nöroloji Anabilim Dalı’nda, ikincisi ise bir yıl sonra Gülhane Askeri Tıp Akademisi Psikiyatri Anabilim Dalı bünyesinde kurulmuştur. Psikiyatri ve Nöroloji Anabilim Dallarını bünyesinde kurulan bu ilk laboratuvarların ardından, 1994 yılında Prof. Dr. Oğuz Köktürk tarafından Gazi Üniversitesi Tıp Fakültesi Göğüs Hastalıkları Anabilim Dalı’nda ve yine SSK Ankara Eğitim ve Araştırma Hastanesi (Dışkapı Yıldırım Beyazıt Eğitim ve Arş. Hastanesi) Göğüs Hastalıkları Kliniği’nde uyku laboratuvarları kurulmuş ve takip eden yıllarda Türkiye’de uyku tıbbi ivme kazanarak, laboratuvarlar hızla ülke çapına yayılmışlardır. Laboratuvarların yaygınlaşması ve bu alana ilgi duyan hekimlerin sayısının katlanarak çoğalmasına paralel olarak, yapılan yayınlar da aynı hızla artış göstermiştir. Bu makalede uykuda solunum bozuklukları konusunda ülkemizde yapılan çalışmalar gözden geçirilmiş ve bu alandaki ülke fotoğrafı çekilmeye çalışılmıştır.

YÖNTEM

Uykuda solunum bozuklukları genel olarak uyku apne sendromu ve hipoventilasyon sendromlarını kapsamaktadır. Bu çalışmada ülkemizde yapılan ve Pub-

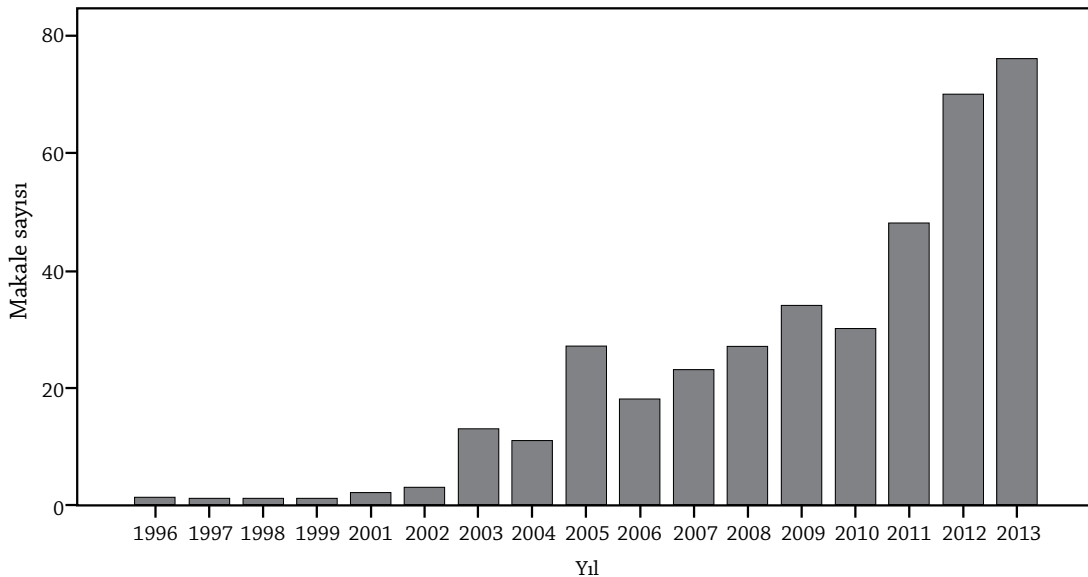
Med kapsamında indekslenen yayınlar “sleep apnea, hypoventilation, sleep disordered breathing, Turkey” anahtar kelimeleri kullanılarak taranmış ve 2013 yılı sonuna kadar indekse girmiş yayınlar gözden geçirilmiştir. Daha sonra ilgili yayınların yıllara, konularına, yayımlandıkları dergilere ve indekslendikleri alanlara göre dağılımları yapılmıştır.

BULGULAR

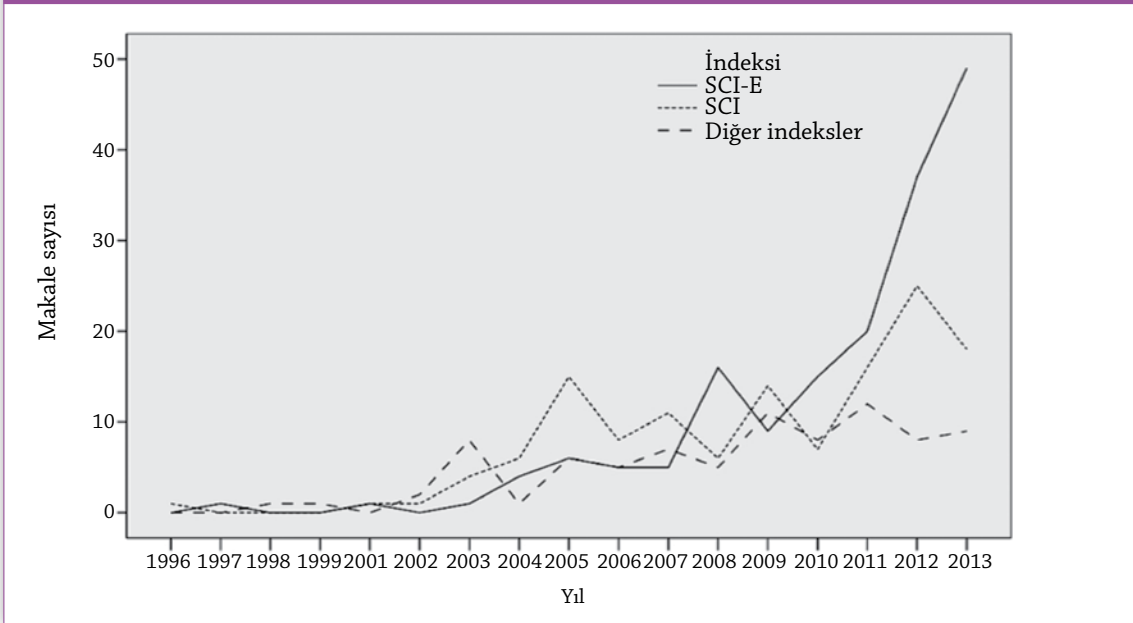
Çalışma kapsamında adı geçen indekste sıralanan 426 makale tek tek incelenmiş ve konu dışı olduğu düşünülen 40 çalışma dışlandıktan sonra kalan 386 makale analizlere dahil edilmiştir. İncelenen makalelerin 343’ü (%88.9) orijinal çalışma, 21’i (%5.4) derleme, 22’si (%5.7) olgu sunumu ve az sayıda da bilimsel mektuptan (scientific letter) oluşmaktadır. Yayınların hemen tamamına yakını erişkin popülasyonda yapılmış, sadece %5.7’si pediatrik yaş grubunda gerçekleştirilmiştir.

PubMed kapsamında indekslenen yayınlar dikkate alındığında, ülkemizden uyku apne (UA) konulu ilk yayının 1996 yılında Gülhane Askeri Tıp Akademisi Kulak Burun Boğaz (KBB) Anabilim Dalı’ndan Dündar ve arkadaşlarının⁽²⁾ yayımladıkları lingual tonsil ve obstrüktif uyku apne (OUA) ilişkisini bildiren olgu sunumu olduğu görülmektedir. Yazarlar bu yayında lingula tonsillektomi ile OUA’nın başarılı bir şekilde tedavi edildiğini bildirmişlerdir. Aynı merkezden bir sonraki yıl OUA’da cerrahi sonuçları ve hasta seçimi ile ilgili bir çalışma daha yayınlanmış ve 50 olgunun dahil edildiği bu çalışmada, olgular MR ile değerlendirilmiştir.

Şekil 1. Uykuda solunum bozuklukları alanında Türkiye’den yapılan yayınların yıllara göre dağılımı.



Şekil 2. Uykuda solunum bozuklukları alanında Türkiye’den yapılan yayınların, SCI kapsamı ve dışı dergilere göre dağılımı ve bunun yıllara göre değişimi.



dirilerek uvulopalatofaringoplasti özellikle yumuşak damak düzeyindeki obstrüksiyonlarda başarılı bulunmuş ve bu başarı özellikle genç, nonobez ve apne-hipopne indeksi (AHI)<40 olan olgularda daha anlamlı bulunmuştur⁽³⁾.

Yıllara Göre Makalelerin Dağılımı

Uykuda solunum bozuklukları alanında 1996-97 yıllarında yapılan bu ilk yayınların ardından çalışmaların hızla ve katlanarak arttığı görülecektir (Şekil 1). İki bin yılına kadar her yıl sadece bir yayın yapılmakta iken, bu rakam 2005 yılında 27'ye, 2012 yılında 70'e ve incelediğimiz son yıl olan 2013'de ise 76'ya yükselmiştir⁽²⁻³⁸⁷⁾. Yayımlanan makalelerin SCI kapsamı ve dışı dağılımları ise Şekil 2'de görülmektedir. Tüm yayınlar dikkate alındığında bunun %34.5'i SCI, %43.8'i SCI-E ve kalanları ise diğer indekslere giren dergilerde yayımlanmıştır.

Makalelerin Basıldıkları Dergilere Göre Branşlarının Dağılımı

Basıldıkları dergiye göre değerlendirildiğinde, en çok makalenin sıra ile KBB, göğüs hastalıkları, uyku, genel tıp ve kardiyoloji dergilerinde basıldığı görülmüştür (Şekil 3). Ancak bu sıralamanın çalışmanın hangi branşta yapıldığı konusunda kaba bir fikir verebileceği tahmin edilebilir. Zira araştırmacıların farklı disiplinlerden dergilere bilimsel makale gönderebildiği bilinmektedir. Ayrıca aynı makalede farklı disiplinlerden araştırmacıların yer alması da kesin bir ayırım yapılmasını güçleştirmektedir.

Konularına Göre Makalelerin Dağılımı

Yayımlanan makaleler konularına göre değerlendirildiğinde en çok çalışılan konunun %84.9 oran ile OUA olduğu, daha az oranda santral uyku apnesi (%0.8), hipoventilasyon (%1.3) ve diğer ilişkili konuların [basit horlama, gündüz aşırı uykululuk hali (GAUH) sıklığı vb.] (%13) olduğu görülmüştür.

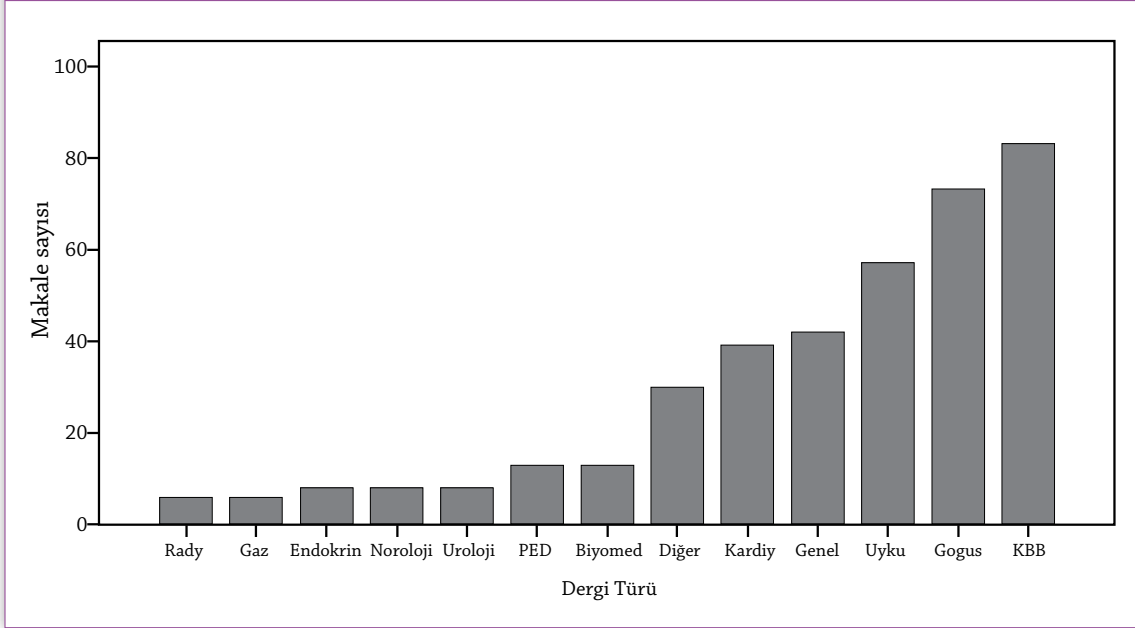
Uyku apne olgularında hangi alanlarda çalışma yapıldığına göz atıldığında, burada ilk sırayı OUA komplikasyonları hakkında yapılan çalışmaların aldığı görülmektedir. Obstrüktif uyku apne sendromu komplikasyonlarını konu alan çalışmaların, tüm yayınların %31.6'sını oluşturduğu görülmüştür. Takiben %20.2 oranında tedavi ve %18.9 oranında tanı konularını işleyen çalışmalar yapılmıştır. Daha az oranlarda da diğer konuların irdelendiği görülmüştür (Şekil 4).

Obstrüktif uyku apne sendromu tanısı konusunda yapılan 73 çalışmanın 39'u (%53.4) klinik tanı, 18'i (%24.7) anatomik-radyolojik tanı ve 16'si (%21.9) ise laboratuvar tanı konularını işlemiştir. Obstrüktif uyku apne sendromu tedavisini konu alan 78 çalışmanın ise 36'sı (%46.2) pozitif havayolu basıncı (PAP) tedavisini, 26'sı (%33.3) cerrahi tedaviyi, 10'u (%12.8) ilaç ve 6'sı (%7.7) ise ağız içi araç tedavisi konularını işlemiştir.

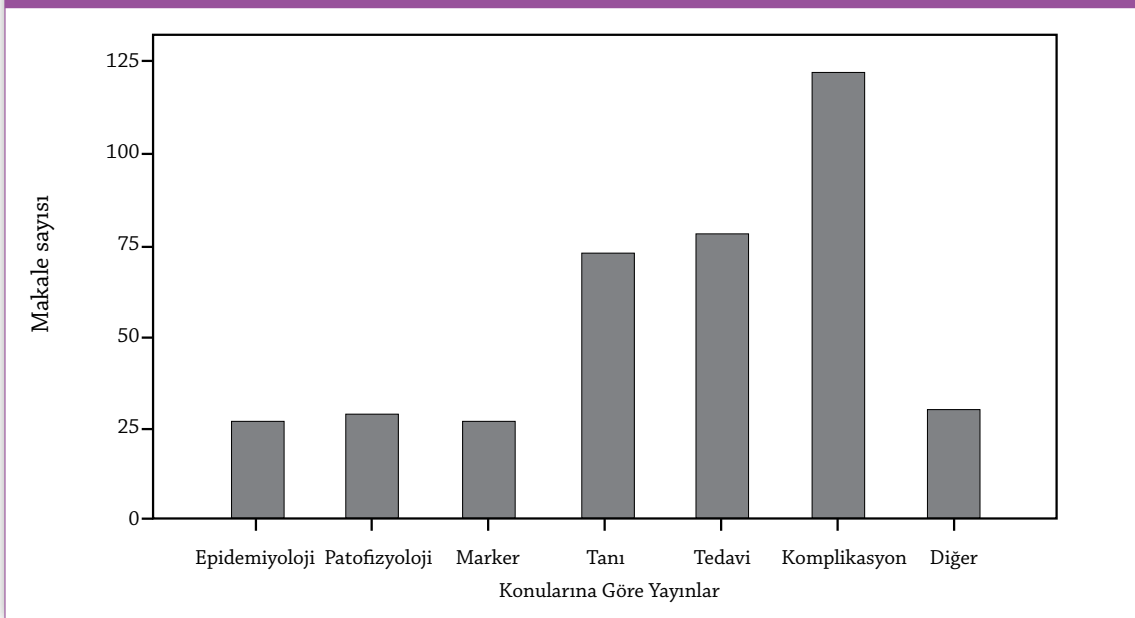
TARTIŞMA

Daha önceleri Charles Dickens'ın romanına konu olmasına rağmen, bilimsel olarak UA sendromu ilk kez 1956 yılında Burwell ve arkadaşları⁽¹⁾ tarafından

Şekil 3. Uykuda solunum bozuklukları alanında Türkiye'den yapılan yayınların basıldıkları dergi gruplarına göre dağılımı.



Şekil 4. Uykuda solunum bozuklukları alanında Türkiye'den yapılan yayınların konularına göre dağılımı.



tanımlanmıştır. Ancak uyku ve solunum kayıtlarının kullanımı ve bugünkü anlamda tanımı ise 1973 yılında Christian Guilleminault tarafından yapılmıştır⁽¹⁾. Konu ile ilgili çalışma ve yayınların tüm dünyada 1980'li yılların başı itibariyle gelmeye başladığı ve sonrasında katlanarak çoğaldığı görülmektedir. Nitekim PubMed verileri incelendiğinde ABD, İngiltere ve Almanya gibi batılı ülkelerde uyku apne ile ilgili ilk çalışmaların 1978-85'li yıllarda yayımlandığı görülmektedir⁽³⁸⁸⁻³⁹⁰⁾.

İlk bilimsel çalışmaların yayınlanmasının ardından, çok gecikmeden 1986 yılında ülkemizde ilk uyku laboratuvarları kurulmuş ancak tüm ülke çapında yaygınlaşması 2000'li yılların ikinci yarısında gerçekleşmiştir. Uyku apne konulu ilk ulusal yayının 1996 yılında Dündar ve arkadaşları tarafından yapıldığı dikkate alındığında⁽²⁾, ülkemizin batılı ülkelere göre uyku apne alanında çalışmalara yaklaşık 10-15 yıl gecikmeli olarak girdiği dikkati çekmektedir. Ancak bu gecikmeye rağmen, uyku laboratuvarlarının ku-

rulması ve yaygınlaşmasına paralel olarak, bu alanda üretilen yayınlar da hızla ve giderek artış göstermiş ve batılı ülkelerle kıyaslanabilir hale gelmiştir. Nitekim 2013 yılında ülkemizden çıkan yayın sayısının 76'ya yükseldiği görülmekte ve bu sayının Almanya, Fransa, İspanya gibi ülkelerle karşılaştırılabilir olduğu dikkati çekmektedir⁽³⁹¹⁾.

Ülkemizden uyku apne ile ilgili yapılan yayınlar gözden geçirildiğinde, araştırmacıların hemen her konuda çalışmalar yaptıkları ve ilk sırayı da uyku apneye eşlik eden komplikasyonların aldığı görülmektedir. Takiben hastalığın tedavi ve tanısı ile ilgili çalışmalara odaklanıldığı izlenmektedir. Ayrıca çalışmaların %80'inin SCI kapsamına giren uluslararası dergilerde yayınlandığı dikkate alındığında, ülkemizden yapılan yayınların küçümsenmeyecek bir önem ve kalitede olduğu söylenebilir.

Çalışmamızın sadece PubMed indeksine giren dergileri kapsamaması ve belli anahtar kelimelerle yapılması, adı geçen indekse girmeyen ve ulusal dergilerde yayınlanan çalışmaların gözardı edilmesi sonucunu doğurmakla birlikte, sonuçlarımızın diğer ülkelerdeki durum ile kıyaslamaya imkan vermesi açısından böyle bir yol tercih edilmiştir. Yine de PubMed kapsamında yapılan bu çalışmanın sonuçlarının büyük oranda ülkemizdeki durumu doğru olarak yansıttığı kanısındayız.

SONUÇ

Ülkemizin uyku tıbbı alanına gecikmeli girişi, bu alanda yapılan çalışma ve üretilen bilimsel yayınlarda gecikme yaşanmasına neden olmuştur. Ancak son yıllarda uyku laboratuvarlarının yaygınlaşması ile birlikte ortaya konan ve katlanarak artan çalışmalar, kalite ve sayı itibarıyla batılı ülkelerle kıyaslanabilecek düzeye ulaşmıştır.

KAYNAKLAR

1. Karadağ M, Ursavaş A. Dünyada ve Türkiye'de Uyku Çalışmaları. *Akciğer Arşivi* 2007; 8: 62-4.
2. Dündar A, Özünlü A, Sahan M, Ozgen F. Lingual tonsil hypertrophy producing obstructive sleep apnea. *Laryngoscope* 1996; 106: 1167-9.
3. Dündar A, Gerek M, Özünlü A, Yetiser S. Patient selection and surgical results in obstructive sleep apnea. *Eur Arch Otorhinolaryngol* 1997; 254: S157-61.
4. Ustündağ Y, Bayraktar Y, Emri S. Superior vena cava thrombosis and obstructive sleep apnea in a patient with familial Mediterranean fever. *Am J Med Sci* 1998; 316: 53-5.
5. Cilli A, Tatlıoğlu T, Köktürk O. Nocturnal oxygen desaturation in coronary artery disease. *Jpn Heart J* 1999; 40: 23-9.
6. Erdamar B, Suoğlu Y, Cuhadaroğlu C, Katircioğlu S, Güven M. Evaluation of clinical parameters in patients with obstructive sleep apnea and possible correlation with the severity of the disease. *Eur Arch Otorhinolaryngol* 2001; 258: 492-5.
7. Cinar U, Vural C, Cakir B, Topuz E, Karaman MI, Turgut S. Nocturnal enuresis and upper airway obstruction. *Int J Pediatr Otorhinolaryngol* 2001; 59: 115-8.
8. Ozdemir M, Keleş N, Yücel E, Cuhadaroğlu C, Değer K. The efficacy of laser-assisted uvulopalatoplasty in the treatment of snoring and obstructive sleep apnea. *Kulak Burun Bogaz İhtis Derg* 2002; 9: 193-7.
9. Kara CO, Ergin H, Koçak G, et al. Prevalence of tonsillar hypertrophy and associated oropharyngeal symptoms in primary school children in Denizli, Turkey. *Int J Pediatr Otorhinolaryngol* 2002; 66: 175-9.
10. Unal M, Oztürk L, Kanik A. The role of oxygen saturation measurement and body mass index in distinguishing between non-apnoeic snorers and patients with obstructive sleep apnoea syndrome. *Clin Otolaryngol Allied Sci* 2002; 27: 344-6.
11. Köktürk O, Güven SF. [Upper airway resistance syndrome]. *Tuberk Toraks* 2003; 51: 216-26.
12. Köktürk O, Ciftçi TU. [Central sleep apnea syndrome]. *Tuberk Toraks* 2003; 51: 349-60.
13. Köktürk O, Ciftçi B. [Overlap syndrome]. *Tuberk Toraks* 2003; 51: 333-48.
14. Gülbay BE, Acican T, Doğan R, Baççioğlu A, Güllü E, Karadağ G. [The evaluation of excessive daytime sleepiness in taxi drivers]. *Tuberk Toraks* 2003; 51: 385-9.
15. Cuhadaroğlu C, Keles N, Erdamar B, Aydemir N, Yucel E, Oguz F, et al. Body position and obstructive sleep apnea syndrome. *Pediatr Pulmonol* 2003; 36: 335-8.
16. Kaynak D, Göksan B, Kaynak H, et al. Is there a link between the severity of sleep-disordered breathing and atherosclerotic disease of the carotid arteries? *Eur J Neurol* 2003; 10:4 87-93.
17. Erdem CZ, Altın R, Erdem LO, et al. Doppler measurement of blood flow velocities in extraocular orbital vessels in patients with obstructive sleep apnea syndrome. *J Clin Ultrasound* 2003; 31: 250-7.
18. Oztürk L, Mansour B, Yüksel M, Yalçın AS, Çelikoğlu F, Gökhan N. Lipid peroxidation and osmotic fragility of red blood cells in sleep-apnea patients. *Clin Chim Acta* 2003; 332: 83-8.
19. Pelin Z, Karadeniz D, Oztürk L, Gözükmizi E, Kaynak H. The role of mean inspiratory effort on daytime sleepiness. *Eur Respir J* 2003; 21: 688-94.
20. Selimoğlu E, Selimoğlu MA, Orbak Z. Does adenotonsillectomy improve growth in children with obstructive adenotonsillar hypertrophy? *J Int Med Res* 2003; 31: 84-7.
21. Ozturk L, Unal M, Tamer L, Celikoglu F. The association of the severity of obstructive sleep apnea with plasma

- leptin levels. *Arch Otolaryngol Head Neck Surg* 2003; 129: 538-40.
22. Unal M, Oztürk L, Oztürk C, Kabal A. The seroprevalence of *Helicobacter pylori* infection in patients with obstructive sleep apnoea: a preliminary study. *Clin Otolaryngol Allied Sci* 2003; 28: 100-2.
 23. Köktürk O, Ciftçi TU. Obesity-hypoventilation syndrome. *Tuberk Toraks* 2003; 51 :107-16.
 24. Erol FS, Kaplan M. Spontaneous pneumocephalus presenting with apnea attacks in a newborn with open myelomeningocele. *Pediatr Neurosurg* 2004; 40: 312-3.
 25. Erden S, Cagatay T, Buyukozturk S, et al. Hashimoto thyroiditis and obstructive sleep apnea syndrome: is there any relation between them? *Eur J Med Res* 2004; 9: 570-2.
 26. Ciftci TU, Kokturk O, Ozkan S. Apnea-hypopnea indexes calculated using different hypopnea definitions and their relation to major symptoms. *Sleep Breath* 2004; 8: 141-6.
 27. Ciftci TU, Kokturk O, Bukan N, Bilgihan A. The relationship between serum cytokine levels with obesity and obstructive sleep apnea syndrome. *Cytokine* 2004; 28: 87-91.
 28. Izci B, Firat H, Ardiç S, Köktürk O, Gelir E, Altinörs M. Adaptation of functional outcomes of sleep questionnaire (FOSQ) to Turkish population. *Tuberk Toraks* 2004; 52: 224-30.
 29. Ersu R, Arman AR, Save D, et al. Prevalence of snoring and symptoms of sleep-disordered breathing in primary school children in istanbul. *Chest* 2004; 126: 19-24.
 30. Aydın M, Altin R, Ozeren A, Kart L, Bilge M, Unalacak M. Cardiac autonomic activity in obstructive sleep apnea: time-dependent and spectral analysis of heart rate variability using 24-hour Holter electrocardiograms. *Tex Heart Inst J* 2004; 31: 132-6.
 31. Idiman F, Oztura I, Baklan B, Ozturk V, Kursad F, Pakoz B. Headache in sleep apnea syndrome. *Headache*. 2004; 44: 603-6.
 32. Kaynak H, Kaynak D, Oztura I. Does frequency of nocturnal urination reflect the severity of sleep-disordered breathing? *J Sleep Res* 2004; 13: 173-6.
 33. Ozdemir H, Altin R, Sögüt A, et al. Craniofacial differences according to AHI scores of children with obstructive sleep apnoea syndrome: cephalometric study in 39 patients. *Pediatr Radiol* 2004; 34: 393-9.
 34. Oztürk O, Oztürk L, Ozdogan A, Oktem F, Pelin Z. Variables affecting the occurrence of gastroesophageal reflux in obstructive sleep apnea patients. *Eur Arch Otorhinolaryngol* 2004; 261: 229-32.
 35. Fidan F, Unlu M, Sezer M, Kara Z. Prevalence of habitual snoring and sleep-disordered breathing in primary school children in Afyonkarahisar. *Tuberk Toraks* 2005; 53: 379-85.
 36. Başgöl E, Celiker V, Gözaçan A. Pediatric obstructive sleep apnea syndrome and anesthetic management. *Turk J Pediatr* 2005; 47: 348-58.
 37. Kasikcioglu HA, Karasulu L, Durgun E, Oflaz H, Kasikcioglu E, Cuhadaroglu C. Aortic elastic properties and left ventricular diastolic dysfunction in patients with obstructive sleep apnea. *Heart Vessels* 2005; 20: 239-44.
 38. Ekici A, Ekici M, Kurtipek E, et al. Association of asthma-related symptoms with snoring and apnea and effect on health-related quality of life. *Chest* 2005; 128: 3358-63.
 39. Yucel A, Unlu M, Haktanir A, Acar M, Fidan F. Evaluation of the upper airway cross-sectional area changes in different degrees of severity of obstructive sleep apnea syndrome: cephalometric and dynamic CT study. *AJNR Am J Neuroradiol* 2005; 26: 2624-9.
 40. Kokturk O, Ciftci TU, Mollarecep E, Ciftci B. Elevated C-reactive protein levels and increased cardiovascular risk in patients with obstructive sleep apnea syndrome. *Int Heart J* 2005; 46: 801-9.
 41. Dursunoğlu N, Dursunoğlu D. Obstructive sleep apnea syndrome, endothelial dysfunction and coronary atherosclerosis. *Tuberk Toraks* 2005; 53: 299-306.
 42. Gerek M, Akçam T, Durmaz A. Radiofrequency thermal ablation of the soft palate in patients with snoring and mild sleep apnea. *Kulak Burun Bogaz Ihtis Derg* 2005; 14: 67-78.
 43. Kara CO, Zencir M, Topuz B, Ardiç N, Kocagözoğlu B. The prevalence of snoring in adult population. *Kulak Burun Bogaz Ihtis Derg* 2005; 14 :18-24.
 44. Erten Y, Kokturk O, Yuksel A, et al. Relationship between sleep complaints and proinflammatory cytokines in haemodialysis patients. *Nephrology (Carlton)* 2005; 10: 330-5.
 45. Öğretmenoğlu O, Süslü AE, Yücel OT, Onerci TM, Sahin A. Body fat composition: a predictive factor for obstructive sleep apnea. *Laryngoscope* 2005; 115: 1493-8.
 46. Ulukavak Ciftci T, Kokturk O, Bukan N, Bilgihan A. Leptin and ghrelin levels in patients with obstructive sleep apnea syndrome. *Respiration* 2005; 72: 395-401.
 47. Iseri M, Balcioglu O. Radiofrequency versus injection snoreplasty in simple snoring. *Otolaryngol Head Neck Surg* 2005; 133: 224-8.
 48. Omur M, Ozturan D, Elez F, Unver C, Derman S. Tongue base suspension combined with UPPP in severe OSA patients. *Otolaryngol Head Neck Surg* 2005; 133: 218-23.
 49. Dursunoglu D, Dursunoglu N, Evrengül H, et al. Impact of obstructive sleep apnoea on left ventricular mass and global function. *Eur Respir J* 2005; 26: 283-8.
 50. Dursunoğlu N, Dursunoğlu D, Kiliç M. Impact of obstructive sleep apnea on right ventricular global function: sleep apnea and myocardial performance index. *Respiration* 2005; 72: 278-84.
 51. Yılmaz M, Bayazit YA, Ciftci TU, et al. Association of serotonin transporter gene polymorphism with obstructive sleep apnea syndrome. *Laryngoscope* 2005; 115: 832-6.
 52. Dursunoğlu N, Dursunoğlu D, Cuhadaroglu C, Kiliçaslan Z. Acute effects of automated continuous positive airway

- pressure on blood pressure in patients with sleep apnea and hypertension. *Respiration* 2005; 72: 150-5.
53. Dursunoğlu D, Dursunoğlu N, Evrengül H, et al. QT interval dispersion in obstructive sleep apnoea syndrome patients without hypertension. *Eur Respir J* 2005; 25: 677-81.
 54. Oztürk L, Metin G, Cuhadaroğlu C, Utkusavaş A, Tutluoğlu B. FEF(25-75)/FVC measurements and extrathoracic airway obstruction in obstructive sleep apnea patients. *Sleep Breath* 2005; 9: 33-8.
 55. Ozdemir L, Akkurt I, Sümer H, et al. The prevalence of sleep related disorders in Sivas, Turkey. *Tuberk Toraks* 2005; 53: 20-7.
 56. Oztürk LM, Metin G, Cuhadaroğlu C, Utkusavaş A, Tutluoğlu B. Cardiopulmonary responses to exercise in moderate-to-severe obstructive sleep apnea. *Tuberk Toraks* 2005; 53: 10-9.
 57. Dursunoğlu N, Dursunoğlu D. The effects of obstructive sleep apnea hypopnea syndrome on cardiovascular system. *Anadolu Kardiyol Derg* 2005; 5: 41-5.
 58. Altın R, Ozdemir H, Mahmutyazicioğlu K, et al. Evaluation of carotid artery wall thickness with high-resolution sonography in obstructive sleep apnea syndrome. *J Clin Ultrasound* 2005; 33: 80-6.
 59. Sogut A, Altın R, Uzun L, et al. Prevalence of obstructive sleep apnea syndrome and associated symptoms in 3-11-year-old Turkish children. *Pediatr Pulmonol* 2005; 39: 251-6.
 60. Pelin Z, Bozluolcay M. Cluster headache with obstructive sleep apnea and periodic limb movements during sleep: a case report. *Headache* 2005; 45: 81-3.
 61. Altın R, Koksall M, Kart L, et al. Retinal nerve fibre layer measurements are reduced in patients with obstructive sleep apnoea syndrome. *Kargi SH, Eye (Lond)* 2005; 19: 575-9.
 62. Dursunoğlu D, Dursunoğlu N. Cardiovascular diseases in obstructive sleep apnea. *Tuberk Toraks* 2006; 54: 382-96.
 63. Doğan OT, Dal U, Ozşahin SL, et al. The prevalence of sleep related disorders among the drivers and it's relation with traffic accidents. *Tuberk Toraks* 2006; 54: 315-21.
 64. Süslü AE, Öğretmenoğlu O, Onerci TM, Yücel OT. Comparison of two endoscopic examination methods, the Muller maneuver and fiberoptic pharyngoscopy during sleep, in patients with obstructive sleep apnea. *Kulak Burun Bogaz Ihtis Derg* 2006; 16: 200-4.
 65. Bayazit YA, Erdal ME, Yılmaz M, et al. Insulin receptor substrate gene polymorphism is associated with obstructive sleep apnea syndrome in men. *Laryngoscope* 2006; 116: 1962-5.
 66. Yılmaz AD, Unlü E, Orbay H, Sensöz O. Giant pleomorphic adenoma of soft palate leading to obstruction of the nasopharyngeal port. *J Craniofac Surg* 2006; 17: 1001-4.
 67. Aydoğdu M, Ciftçi B, Firat Güven S, Ulukavak Ciftçi T, Erdoğan Y. Assessment of sleep with polysomnography in patients with interstitial lung disease. *Tuberk Toraks* 2006; 54: 213-21.
 68. Tamay Z, Akcay A, Kilic G, Suleyman A, Ones U, Guler N. Are physicians aware of obstructive sleep apnea in children? *Sleep Med* 2006; 7: 580-4.
 69. Ozmen N, Cebeci BS, Kardesoglu E, et al. QT dispersion in non-apneic simple snoring patients and the effect of surgical therapy on QT dispersion. *Int J Cardiol* 2006; 113: 82-5.
 70. Ofiaz H, Cuhadaroglu C, Pamukcu B, et al. Endothelial function in patients with obstructive sleep apnea syndrome but without hypertension. *Respiration* 2006; 73: 751-6.
 71. Fidan H, Fidan F, Unlu M, Ela Y, Ibis A, Tetik L. Prevalence of sleep apnoea in patients undergoing operation. *Sleep Breath* 2006; 10: 161-5.
 72. Tanriverdi H, Evrengul H, Kaftan A, et al. Effect of obstructive sleep apnea on aortic elastic parameters: relationship to left ventricular mass and function. *Circ J* 2006; 70: 737-43.
 73. Tanriverdi H, Evrengul H, Kara CO, et al. Aortic stiffness, flow-mediated dilatation and carotid intima-media thickness in obstructive sleep apnea: non-invasive indicators of atherosclerosis. *Respiration* 2006; 73: 741-50.
 74. Yildirim SV, Durmaz C, Pourbagher MA, Erkan AN. A case of achondroplasia with severe pulmonary hypertension due to obstructive sleep apnea. *Eur Arch Otorhinolaryngol* 2006; 263: 775-7.
 75. Oztura I, Kaynak D, Kaynak HC. Nocturia in sleep-disordered breathing. *Sleep Med* 2006; 7: 362-7.
 76. Dikmenoglu N, Ciftçi B, Ileri E, et al. Erythrocyte deformability, plasma viscosity and oxidative status in patients with severe obstructive sleep apnea syndrome. *Sleep Med* 2006; 7: 255-61.
 77. Can M, Açıköz S, Mungan G, et al. Serum cardiovascular risk factors in obstructive sleep apnea. *Chest* 2006; 129: 233-7.
 78. Bayazit YA, Yılmaz M, Ciftci T, et al. Association of the -1438G/A polymorphism of the 5-HT2A receptor gene with obstructive sleep apnea syndrome. *ORL J Otorhinolaryngol Relat Spec* 2006; 68: 123-8.
 79. Kokturk O, Ciftci TU, Mollarecep E, Ciftci B. Serum homocysteine levels and cardiovascular morbidity in obstructive sleep apnea syndrome. *Respir Med* 2006; 100: 536-41.
 80. Enoz M. Effects of nasal pathologies on obstructive sleep apnea. *Acta Medica (Hradec Kralove)* 2007; 50: 167-70.
 81. Fidan F, Unlü M, Sezer M, Kara Z. Relation between traffic accidents and sleep apnea syndrome in truck drivers. *Tuberk Toraks* 2007; 55: 278-84.
 82. Fidan F, Unlü M, Sezer M, Geçici O, Kara Z. Compliance to CPAP treatment and effects of treatment on anxiety

- and depression in patients with obstructive sleep apnea syndrome. *Tuberk Toraks* 2007; 55: 271-7.
83. Köken G, Sahin FK, Cosar E, et al. Oxidative stress markers in pregnant women who snore and fetal outcome: a case control study. *Acta Obstet Gynecol Scand* 2007; 86: 1317-21.
 84. Ursavaş A, Karadag M, Burgazlioglu B, et al. Relief from sleep apnea after radiation and chemotherapy. *Clin Lung Cancer* 2007; 8 :502-3.
 85. Ursavas A, Karadag M, Ilcol YO, et al. Low level of IGF-1 in obesity may be related to obstructive sleep apnea syndrome. *Lung* 2007; 185: 309-14.
 86. Acartürk G, Unlü M, Yüksel S, Albayrak R, Köken T, Peker Y. et al. Obstructive sleep apnoea, glucose tolerance and liver steatosis in obese women. *J Int Med Res* 2007; 35: 458-66.
 87. Cavusoglu M, Kamasak M, Eroglu O, Ciloglu T, Serinagaoglu Y, Akcam T. et al. An efficient method for snore/nonsnore classification of sleep sounds. *Physiol Meas* 2007; 28: 841-53.
 88. Sepici V, Tosun A, Köktürk O. Obstructive sleep apnea syndrome as an uncommon cause of fibromyalgia: a case report. *Rheumatol Int* 2007; 28: 69-71.
 89. Dursunoglu D, Dursunoglu N. Effect of CPAP on QT interval dispersion in obstructive sleep apnea patients without hypertension. *Sleep Med* 2007; 8: 478-83.
 90. Ursavas A, Karadag M, Ilcol YO, Burgazlioglu B, Ercan I, Gozu RO. Relationship between serum substance P levels and daytime sleepiness in obstructive sleep apnea syndrome. *Chest* 2007; 131: 1400-5.
 91. Asyali MH, Berry RB, Khoo MC, Altinok A. Determining a continuous marker for sleep depth. *Comput Biol Med* 2007; 37: 1600-9.
 92. Kirbas G, Abakay A, Topcu F, Kaplan A, Unlü M, Peker Y. Obstructive sleep apnoea, cigarette smoking and serum testosterone levels in a male sleep clinic cohort. *J Int Med Res* 2007; 35: 38-45.
 93. Bayazit YA, Yilmaz M, Kokturk O, et al. Association of GABA(B)R1 receptor gene polymorphism with obstructive sleep apnea syndrome. *ORL J Otorhinolaryngol Relat Spec* 2007; 69: 190-7.
 94. Tavil Y, Kanbay A, Sen N, et al. The relationship between aortic stiffness and cardiac function in patients with obstructive sleep apnea, independently from systemic hypertension. *J Am Soc Echocardiogr* 2007; 20: 366-72.
 95. Dursunoglu N, Dursunoglu D, Ozkurt S, et al. Severe sleep apnea syndrome diagnosed with acute myocardial infarction. *Asian Cardiovasc Thorac Ann* 2007; 15: e3-6.
 96. Ursavaş A, Karadağ M, Rodoplu E, Yilmaztepe A, Oral HB, Gözü RO. Circulating ICAM-1 and VCAM-1 levels in patients with obstructive sleep apnea syndrome. *Respiration* 2007; 74: 525-32.
 97. Aytemir K, Deniz A, Yavuz B, et al. Increased myocardial vulnerability and autonomic nervous system imbalance in obstructive sleep apnea syndrome. *Respir Med* 2007; 101: 1277-82.
 98. Onat A, Hergenç G, Uyarel H, et al. Obstructive sleep apnea syndrome is associated with metabolic syndrome rather than insulin resistance. *Sleep Breath* 2007; 11: 23-30.
 99. Tavil Y, Kanbay A, Sen N, et al. Comparison of right ventricular functions by tissue Doppler imaging in patients with obstructive sleep apnea syndrome with or without hypertension. *Int J Cardiovasc Imaging* 2007; 23: 469-77
 100. Dursunoglu N, Dursunoglu D, Ozkurt S, et al. Effects of CPAP on left ventricular structure and myocardial performance index in male patients with obstructive sleep apnoea. *Sleep Med* 2007; 8: 51-9.
 101. Kasikcioglu HA1, Karasulu L, Tartan Z, Kasikcioglu E, Cuhadaroglu C, Cam N. Occult cardiac dysfunction in patients with obstructive sleep apnea syndrome revealed by tissue Doppler imaging. *Int J Cardiol* 2007; 118: 203-5.
 102. Köseoğlu N, Köseoğlu H, Itil O, et al. Sexual function status in women with obstructive sleep apnea syndrome. *J Sex Med* 2007; 4: 1352-7.
 103. Aydil U, İşeri E, Kizil Y, Bodur S, Ceylan A, Uslu S. Obstructive upper airway problems and primary enuresis nocturna relationship in pediatric patients: reciprocal study. *J Otolaryngol Head Neck Surg* 2008; 37: 235-9.
 104. Doğan OT, Berk S, Özşahin SL, Arslan S, Düzenli H, Akkurt I. Symptom prevalence of obstructive sleep apnea-hypopnea syndrome in health-care providers in central Sivas. *Tuberk Toraks* 2008; 56: 405-13.
 105. Polat K, Yosunkaya S, Güneş S. A new approach to diagnosing of importance degree of obstructive sleep apnea syndrome: Pairwise AIRS and Fuzzy-AIRS classifiers. *J Med Syst* 2008; 32: 489-97.
 106. Tosun A, Köktürk O, Karata GK, Ciftçi TU, Sepici V. Obstructive sleep apnea in ischemic stroke patients. *Clinics (Sao Paulo)* 2008; 63: 625-30.
 107. Kanbay M, Turgut F, Uyar ME, Akcay A, Covic A. Causes and mechanisms of nondipping hypertension. *Clin Exp Hypertens* 2008; 30: 585-97.
 108. Polat K, Yosunkaya S, Güneş S. Pairwise ANFIS approach to determining the disorder degree of obstructive sleep apnea syndrome. *J Med Syst* 2008; 32: 379-87.
 109. Bayram NA, Ciftci B, Bayram H, et al. Effects of continuous positive airway pressure therapy on right ventricular function assessment by tissue Doppler imaging in patients with obstructive sleep apnea syndrome. *Echocardiography* 2008; 25: 1071-8.
 110. Onem K, Erol B, Sanli O, et al. Is sexual dysfunction in women with obstructive sleep apnea-hypopnea syndrome associated with the severity of the disease? A pilot study. *J Sex Med* 2008; 5: 2600-9.
 111. Cavusoglu M, Ciloglu T, Serinagaoglu Y, Kamasak M, Eroglu O, Akcam T. Investigation of sequential proper-

- ties of snoring episodes for obstructive sleep apnoea identification. *Physiol Meas* 2008; 29: 879-98.
112. Ursavaş A, Karadağ M, Oral AY, Demirdögen E, Oral HB, Ege E. Association between serum neopterin, obesity and daytime sleepiness in patients with obstructive sleep apnea. *Respir Med* 2008; 102: 1193-7.
 113. Songu M, Yılmaz H, Yuceturk AV, et al. Effect of CPAP therapy on catathrenia and OSA: a case report and review of the literature. *Sleep Breath* 2008; 12: 401-5.
 114. Kanbay A, Kokturk O, Ciftci TU, Tavil Y, Bukan N. Comparison of serum adiponectin and tumor necrosis factor-alpha levels between patients with and without obstructive sleep apnea syndrome. *Respiration* 2008; 76: 324-30.
 115. Yetkin O, Kunter E, Gunen H. CPAP compliance in patients with obstructive sleep apnea syndrome. *Sleep Breath* 2008; 12: 365-7.
 116. Polat K, Yosunkaya S, Güneş S. Comparison of different classifier algorithms on the automated detection of obstructive sleep apnea syndrome. *J Med Syst* 2008; 32: 243-50.
 117. Ursavas A. Upregulating substance P levels to treat obstructive sleep apnea. *Expert Opin Ther Targets*. 2008; 12: 583-8.
 118. Ugur MB, Dogan SM, Sogut A, et al. Effect of adenoidectomy and/or tonsillectomy on cardiac functions in children with obstructive sleep apnea. *ORL J Otorhinolaryngol Relat Spec* 2008; 70: 202-8.
 119. Ursavas A, Karadağ M, Gullulu M, et al. Low-grade urinary albumin excretion in normotensive/non-diabetic obstructive sleep apnea patients. *Sleep Breath* 2008; 12: 217-22.
 120. Yavuz Z, Ursavaş A, Ege E, et al. Homocysteine levels in patients with obstructive sleep apnea syndrome. *Tuberk Toraks* 2008; 56: 37-42.
 121. Oktay B, Akbal E, Firat H, Ardic S, Akdemir R, Kizilgun M. Evaluation of the relationship between heart type fatty acid binding protein levels and the risk of cardiac damage in patients with obstructive sleep apnea syndrome. *Sleep Breath* 2008; 12: 223-8.
 122. Ciftci B, Ciftci TU, Guven SF. Split-night versus full-night polysomnography: comparison of the first and second parts of the night. *Arch Bronconeumol* 2008; 44: 3-7.
 123. Bozkurt MK, Oy A, Aydin D, et al. Gender differences in polysomnographic findings in Turkish patients with obstructive sleep apnea syndrome. *Eur Arch Otorhinolaryngol* 2008; 265: 821-4.
 124. Sahin FK, Koken G, Cosar E, Saylan F, Fidan F, Yilmazer M, Unlu M. Obstructive sleep apnea in pregnancy and fetal outcome. *Int J Gynaecol Obstet* 2008; 100: 141-6.
 125. Izci B, Ardic S, Firat H, Sahin A, Altinors M, Karacan I. Reliability and validity studies of the Turkish version of the Epworth Sleepiness Scale. *Sleep Breath* 2008; 12: 161-8.
 126. Ozkan Y, Firat H, Simşek B, Torun M, Yardim-Akaydin S. Circulating nitric oxide (NO), asymmetric dimethylarginine (ADMA), homocysteine, and oxidative status in obstructive sleep apnea-hypopnea syndrome (OSAHS). *Sleep Breath* 2008; 12: 149-54.
 127. Karakucuk S, Goktas S, Aksu M, et al. Ocular blood flow in patients with obstructive sleep apnea syndrome (OSAS). *Graefes Arch Clin Exp Ophthalmol* 2008; 246: 129-34.
 128. Ekici M, Ekici A, Keles H, et al. Risk factors and correlates of snoring and observed apnea. *Sleep Med* 2008; 9: 290-6.
 129. Gülbay BE, Acican T, Onen ZP, et al. Health-related quality of life in patients with sleep-related breathing disorders: relationship with nocturnal parameters, daytime symptoms and comorbid diseases. *Respiration* 2008; 75: 393-401.
 130. Bekci TT, Kocak N, Kesli R. Distribution of common methylenetetrahydrofolate reductase gene mutations in patients with obstructive sleep apnoea. *J Int Med Res* 2009; 37: 1718-24.
 131. Acar B, Babademez MA, Karabulut H, Ciftçi B, Günbey E, Karaşen RM. Otorhinolaryngologic examination in obstructive sleep apnea syndrome: the correlation between the severity of sleep disorder and physical examination. *Kulak Burun Bogaz Ihtis Derg* 2009; 19: 246-52.
 132. Sezen OS, Kaytanci H, Salepci B, et al. Palatal Pillar implants for the treatment of simple snoring. *Kulak Burun Bogaz Ihtis Derg* 2009; 19: 239-45.
 133. Inanlı HM, Enoz M, Hafız G. Is dynamic MM a suitable method for every sleep apnea patient? *Indian J Otolaryngol Head Neck Surg* 2009; 61: 333.
 134. Kurtulmus H, Cotert S, Bilgen C, On AY, Boyacioglu H. The effect of a mandibular advancement splint on electromyographic activity of the submental and masseter muscles in patients with obstructive sleep apnea. *Int J Prosthodont* 2009; 22: 586-93.
 135. Caylak E. The genetics of sleep disorders in humans: narcolepsy, restless legs syndrome, and obstructive sleep apnea syndrome. *Am J Med Genet A* 2009; 149A: 2612-26.
 136. Bayram NA, Ciftci B, Keles T, et al. Endothelial function in normotensive men with obstructive sleep apnea before and 6 months after CPAP treatment. *Sleep* 2009; 32: 1257-63.
 137. Sogut A, Yılmaz O, Dinc G, Yuksel H. Prevalence of habitual snoring and symptoms of sleep-disordered breathing in adolescents. *Int J Pediatr Otorhinolaryngol* 2009; 73: 1769-73.
 138. Sahin U, Ozturk O, Ozturk M, et al. Habitual snoring in primary school children: prevalence and association with sleep-related disorders and school performance. *Med Princ Pract* 2009; 18: 458-65.
 139. Öztürk O, Mutlu LC, Sağcan G, Deniz Y, Cuhadaroğlu C. The concordance of manual (visual) scoring and automatic analysis in sleep staging. *Tuberk Toraks* 2009; 57: 306-13.

140. Ceylan K, Emir H, Kizilkaya Z, et al. First-choice treatment in mild to moderate obstructive sleep apnea: single-stage, multilevel, temperature-controlled radiofrequency tissue volume reduction or nasal continuous positive airway pressure. *Arch Otolaryngol Head Neck Surg* 2009; 135: 915-9.
141. Gümüşsoy M, Atmaca S, Bilgici B, Unal R. Changes in IGF-I, IGFBP-3 and ghrelin levels after adenotonsillectomy in children with sleep disordered breathing. *Int J Pediatr Otorhinolaryngol* 2009; 73: 1653-6.
142. Sezgin N, Emin Tagluk M. Energy based feature extraction for classification of sleep apnea syndrome. *Comput Biol Med* 2009; 39: 1043-50.
143. Kurukahvecioglu S, Firat H, Ardic S. Evaluation of upper airway in obstructive sleep apnea-hypopnea syndrome and habitual snorers. *Bratisl Lek Listy* 2009; 110: 486-9.
144. Keles T, Durmaz T, Bayram NA, et al. Effect of continuous positive airway pressure therapy on aortic stiffness in patients with obstructive sleep apnea syndrome. *Echocardiography* 2009; 26: 1217-24.
145. Ursavaş A, Karadağ M. Sleep breathing disorders in pregnancy. *Tuberk Toraks* 2009; 57: 237-43.
146. Kalpaklıoğlu AF, Kavut AB, Ekici M. Allergic and non-allergic rhinitis: the threat for obstructive sleep apnea. *Ann Allergy Asthma Immunol* 2009; 103: 20-5.
147. Eskiizmir G, Kezirian E. Is there a vicious cycle between obstructive sleep apnea and laryngopharyngeal reflux disease? *Med Hypotheses* 2009; 73: 706-8.
148. Ucar ZZ, Taymaz Z, Erbaycu AE, et al. Nocturnal hypoxia and arterial lactate levels in sleep-related breathing disorders. *South Med J* 2009; 102: 693-700.
149. Aksu K, Firat Güven S, Aksu F, et al. Obstructive sleep apnoea, cigarette smoking and plasma orexin-A in a sleep clinic cohort. *J Int Med Res* 2009; 37: 331-40.
150. Araz O, Turan A, Yoruk O, Alper F, Akgun M. Laryngocele and epiglottic cyst as rare causes of obstructive sleep apnea. *Sleep Breath* 2009; 13: 285-7.
151. Tosun F, Kemikli K, Yetkin S, Ozgen F, Durmaz A, Gerek M. Impact of endoscopic sinus surgery on sleep quality in patients with chronic nasal obstruction due to nasal polyposis. *J Craniofac Surg* 2009; 20: 446-9.
152. Solak O, Fidan F, Dündar U, et al. The prevalence of obstructive sleep apnoea syndrome in ankylosing spondylitis patients. *Rheumatology (Oxford)* 2009; 48: 433-5.
153. Kurtulmus H, Cotert HS. Management of obstructive sleep apnea with a mandibular and tongue advancement splint (MTAS) in a completely edentulous patient. A clinical report. *J Prosthodont* 2009; 18: 348-52.
154. Goksan B, Gunduz A, Karadeniz D, et al. Morning headache in sleep apnoea: clinical and polysomnographic evaluation and response to nasal continuous positive airway pressure. *Cephalalgia* 2009; 29: 635-41.
155. Dursunoglu N, Ozkurt S, Sarikaya S. Is the clinical presentation different between men and women admitting to the sleep laboratory? *Sleep Breath* 2009; 13: 295-8.
156. Tugcu A, Guzel D, Yildirimturk O, Aytekin S. Evaluation of right ventricular systolic and diastolic function in patients with newly diagnosed obstructive sleep apnea syndrome without hypertension. *Cardiology* 2009; 113: 184-92.
157. Cuhadaroğlu C, Utkusavaş A, Oztürk L, Salman S, Ece T. Effects of nasal CPAP treatment on insulin resistance, lipid profile, and plasma leptin in sleep apnea. *Lung* 2009; 187: 75-81.
158. Ucok K, Aycicek A, Sezer M, et al. Aerobic and anaerobic exercise capacities in obstructive sleep apnea and associations with subcutaneous fat distributions. *Lung* 2009; 187: 29-36.
159. Kepez A, Niksarlioglu EY, Hazirolan T, et al. Early myocardial functional alterations in patients with obstructive sleep apnea syndrome. *Echocardiography* 2009; 26: 388-96.
160. Onat A, Hergenç G, Yüksel H, et al. Neck circumference as a measure of central obesity: associations with metabolic syndrome and obstructive sleep apnea syndrome beyond waist circumference. *Clin Nutr* 2009; 28: 46-51.
161. Akar Bayram N, Ciftci B, Durmaz T, et al. Effects of continuous positive airway pressure therapy on left ventricular function assessed by tissue Doppler imaging in patients with obstructive sleep apnoea syndrome. *Eur J Echocardiogr* 2009; 10: 376-82.
162. Bayazit YA, Yilmaz M, Erdal E, et al. Role of nitric oxide synthase gene intron 4 and exon 7 polymorphisms in obstructive sleep apnea syndrome. *Eur Arch Otorhinolaryngol* 2009; 266: 449-54.
163. Kurtulmus H, Cotert HS. Management of obstructive sleep apnea in an edentulous patient with a combination of mandibular advancement splint and tongue-retaining device: a clinical report. *Sleep Breath* 2009; 13: 97-102.
164. Canguven O, Salepci B, Albayrak S, Selimoglu A, Balaban M, Bulbul M. Is there a correlation between testosterone levels and the severity of the disease in male patients with obstructive sleep apnea? *Arch Ital Urol Androl* 2010; 82: 143-7.
165. İnönü H, Köktürk O. Sleep disorders in end-stage renal failure. *Tuberk Toraks* 2010; 58: 450-4.
166. Aksoy F, Yıldırım YS, Ozturan O, Veyseller B, Cuhadaroğlu C. Eustachian tube function in patients receiving continuous positive airway pressure treatment for sleep apnea syndrome. *J Otolaryngol Head Neck Surg* 2010; 39: 752-6.
167. Acioğlu E, Yiğit O, Volkan Sunter A, Taşkın U, Berçik İnal B, Sahin M. Obesity and obstructive sleep apnea syndrome. *J Otolaryngol Head Neck Surg* 2010; 39: 744-51.
168. Bican A, Kahraman A, Bora I, Kahveci R, Hakyemez B. What is the efficacy of nasal surgery in patients with obstructive sleep apnea syndrome? *J Craniofac Surg* 2010; 21: 1801-6.
169. Kart L, Dutkun Y, Altın R, et al. Prevalence of major obstructive sleep apnea syndrome symptoms in coal miners and healthy adults. *Tuberk Toraks* 2010; 58: 261-7.

170. Varol E, Ozturk O, Gonca T, et al. Mean platelet volume is increased in patients with severe obstructive sleep apnea. *Scand J Clin Lab Invest* 2010; 70: 497-502.
171. Ursavas A, Ilcol YO, Nalci N, Karadag M, Ege E. Ghrelin, leptin, adiponectin, and resistin levels in sleep apnea syndrome: Role of obesity. *Ann Thorac Med* 2010; 5: 161-5.
172. Kiratli PO, Demir AU, Volkan-Salanci B, Demir B, Sahin A. Cerebral blood flow and cognitive function in obstructive sleep apnea syndrome. *Hell J Nucl Med* 2010; 13: 138-43.
173. Yilmaz B, Asyali MH, Arikan E, Yetkin S, Ozgen F. Sleep stage and obstructive apneic epoch classification using single-lead ECG. *Biomed Eng Online* 2010; 9: 39.
174. Varol E, Akcay S, Ozaydin M, et al. Influence of obstructive sleep apnea on left ventricular mass and global function: sleep apnea and myocardial performance index. *Heart Vessels* 2010; 25: 400-4.
175. Civelek S, Cakir B, Emre I, Ozelik M, Turgut S. GlideScope video laryngoscope-assisted tongue base radiofrequency for the treatment of obstructive sleep apnea: pilot study. *J Otolaryngol Head Neck Surg* 2010; 39: 329-34.
176. Eryilmaz S, Aydinlar A, Senturk T, Ursavas A, Aydin Kaderli A, Ozdemir B. Continuous positive airway pressure therapy improves arterial elasticity in patients with obstructive sleep apnea. *Respir Med* 2010; 104: 1571-6.
177. Dursunoğlu D, Dursunoğlu N. Heart failure and sleep apnea. *Turk Kardiyol Dern Ars* 2010; 38: 135-43.
178. Yakut T, Karkucak M, Ursavas A, et al. Lack of association of ACE gene I/D polymorphism with obstructive sleep apnea syndrome in Turkish patients. *Genet Mol Res* 2010; 9: 734-8.
179. Karasulu L, Epöztürk PO, Sökücü SN, Dalar L, Altin S. Improving Heart rate variability in sleep apnea patients: differences in treatment with auto-titrating positive airway pressure (APAP) versus conventional CPAP. *Lung* 2010; 188: 315-20.
180. Babademez MA, Ciftci B, Acar B, et al. Low-temperature bipolar radiofrequency ablation (coblation) of the tongue base for supine-position-associated obstructive sleep apnea. *ORL J Otorhinolaryngol Relat Spec* 2010; 72: 51-5.
181. Tunçel U, Inançlı HM, Kürkçüoğlu SS, Enöz M. Can the Müller maneuver detect multilevel obstruction of the upper airway in patients with obstructive sleep apnea syndrome? *Kulak Burun Bogaz Ihtis Derg* 2010; 20: 84-8.
182. Ogus C, Ket S, Bilgen T, et al. Insertion/deletion polymorphism and serum activity of the angiotensin-converting enzyme in Turkish patients with obstructive sleep apnea syndrome. *Biochem Genet* 2010; 48: 516-23.
183. Sürmen N, Korkut AY, Meriç A, Kahya V, Gedikli O. Our results with respect to uvulopalatopharyngoplasty in patients with snoring and obstructive sleep apnea syndrome. *Kulak Burun Bogaz Ihtis Derg* 2010; 20: 33-7.
184. Tuğcu A, Yildirimtürk O, Tayyareci Y, Demiroglu C, Aytekin S. Evaluation of subclinical right ventricular dysfunction in obstructive sleep apnea patients using velocity vector imaging. *Circ J* 2010; 74: 3 12-9.
185. Taskin U, Yigit O, Acioglu E, Aricigil M, Toktas G, Guzelhan Y. Erectile dysfunction in severe sleep apnea patients and response to CPAP. *Int J Impot Res* 2010; 22: 134-9.
186. Tulek B, Kanat F, Yosunkaya S, Ceran S, Suerdem M. Pneumothorax as an initial manifestation of obstructive sleep apnea syndrome. *Sleep Breath* 2010; 14: 249-51.
187. Inançlı HM, Enoz M. Obstructive sleep apnea syndrome and upper airway inflammation. *Recent Pat Inflamm Allergy Drug Discov* 2010; 4: 54-7.
188. Cifçi N, Uyar M, Elbek O, Süyür H, Ekinci E. Impact of CPAP treatment on cardiac biomarkers and pro-BNP in obstructive sleep apnea syndrome. *Sleep Breath* 2010; 14: 241-4.
189. Piskin B, Sentut F, Sevketyoglu H, et al. Efficacy of a modified mandibular advancement device for a totally edentulous patient with severe obstructive sleep apnea. *Sleep Breath* 2010; 14: 81-5.
191. Kıyan E, Okumus G, Cuhadaroglu C, Deymeer F. Sleep apnea in adult myotonic dystrophy patients who have no excessive daytime sleepiness. *Sleep Breath* 2010; 14: 19-24.
192. Sarıman N, Levent E, Aksungar FB, Soyulu AC, Bektaş O. Homocysteine levels and echocardiographic findings in obstructive sleep apnea syndrome. *Respiration* 2010; 79: 38-45.
193. Onal H, Ersen A. A case of late-onset central hypoventilation syndrome with hypothalamic dysfunction: through a new phenotype. *Turk J Pediatr* 2010; 52: 198-202.
194. Cicek D, Lakadamyali H, Yağbasan BD, Sapmaz I, Müderrisoğlu H. Obstructive sleep apnoea and its association with left ventricular function and aortic root parameters in newly diagnosed, untreated patients: a prospective study. *J Int Med Res* 2011; 39: 2228-38.
195. Karci E, Dogrusoz YS, Ciloglu T. Detection of post apnea sounds and apnea periods from sleep sounds. *Conf Proc IEEE Eng Med Biol Soc* 2011; 2011: 6075-8.
196. Dursunoğlu D, Dursunoğlu N. Cardiovascular biomarkers in clinical practice of sleep apnea]. *Tuberk Toraks* 2011; 59: 402-8.
197. Yelmen N, Ozdemir S, Guner I, et al. The effects of chronic long-term intermittent hypobaric hypoxia on blood rheology parameters. *Gen Physiol Biophys* 2011; 30: 389-95.
198. Ceyhan A, Uyar ET, Gencay IY, Gunal SE. Anesthesia in multiple sclerosis and obstructive sleep apnea: case report and literature review. *J Res Med Sci* 2011; 16: 828-35.
199. Yüksel H, Söğüt A, Yılmaz O, Kutluay E. Reliability and validity of the Turkish version of the pediatric sleep questionnaire: a tool for prediction of sleep related breathing disorder. *Tuberk Toraks* 2011; 59: 236-41.
200. Sari E, Menillo S. Comparison of titratable oral appliance and mandibular advancement splint in the treatment of patients with obstructive sleep apnea. *ISRN Dent* 2011; 2011: 581692.

201. Tatlipinar A, Duman D, Uslu C, Egeli E. The effects of obstructive sleep apnea syndrome due to adenotonsillar hypertrophy on the cardiovascular system in children. *Turk J Pediatr* 2011; 53: 359-63.
202. Tuncyurek O, Eyigor H, Ozkul A. What is the importance of radiology in obstructive sleep apnea? *J Craniofac Surg* 2011; 22: 1971-3.
203. Ermis F, Akyuz F, Arici S, et al. Effect of proton pump inhibitor (PPI) treatment in obstructive sleep apnea syndrome: an esophageal impedance-pHmetry study. *Hepatogastroenterology* 2011; 58: 1566-73.
204. Uyar M, Vrt O, Bayram N, et al. Gender differences with respect to psychiatric comorbidity in obstructive sleep apnea syndrome. *South Med J* 2011; 104: 495-8.
205. Tatlipinar A, Cimen B, Duman D, Esen E, Köksal S, Gökçer T. Effect of adenotonsillectomy on endothelin-1 and C-reactive protein levels in children with sleep-disordered breathing. *Otolaryngol Head Neck Surg* 2011; 145: 1030-5.
206. Babademez MA, Yorubulut M, Yurekli MF, et al. Comparison of minimally invasive techniques in tongue base surgery in patients with obstructive sleep apnea. *Otolaryngol Head Neck Surg* 2011; 145: 858-64.
207. Ugur KS, Ark N, Kurtaran H, Ozol D, Kurt K, Mutlu C. Comparison of scores of application methods of the Epworth Sleepiness Scale: self administered or nurse administered. *ORL J Otorhinolaryngol Relat Spec* 2011; 73: 249-52.
208. Ozeke O, Güngör M, Hızal SB, et al. Influence of the severity of obstructive sleep apnea on nocturnal heart rate indices and its association with hypertension. *Anadolu Kardiyol Derg* 2011; 11: 509-14.
209. Dalgic A, Hidir Y, Birkent AH, Durmaz A, Gerek M. Life-threatening upper airway obstruction due to isolated hypermobile tongue. *J Craniofac Surg* 2011; 22: 1529-31.
210. Acar GÖ, Cansz H, Duman C, Öz B, Çiğerciogullar E. Excessive reactive lymphoid hyperplasia in a child with persistent obstructive sleep apnea despite previous tonsillectomy and adenoidectomy. *J Craniofac Surg* 2011; 22: 1413-5.
211. Basoglu OK, Sarac F, Sarac S, Uluer H, Yilmaz C. Metabolic syndrome, insulin resistance, fibrinogen, homocysteine, leptin, and C-reactive protein in obese patients with obstructive sleep apnea syndrome. *Ann Thorac Med* 2011; 6: 120-5.
212. Cagirci G, Cay S, Gulsoy KG, et al. Tissue Doppler atrial conduction times and electrocardiogram interlead P-wave durations with varying severity of obstructive sleep apnea. *J Electrocardiol* 2011; 44: 478-82.
213. Bekci TT, Kayrak M, Kiyici A, et al. The association among lipoprotein-associated phospholipase A2 levels, total antioxidant capacity and arousal in male patients with OSA. *Int J Med Sci* 2011; 8: 369-76.
214. Kepez A, Niksarlıoğlu EY, Hazirolan T, et al. Evaluation of association between obstructive sleep apnea and coronary risk scores predicted by tomographic coronary calcium scoring in asymptomatic patients. *Anadolu Kardiyol Derg* 2011; 11: 428-35.
215. Arı H, Arı S, Yazıcı F, Koca V, Bozat T. Cardiac autonomic function and cardiac arrhythmias in patients with obstructive sleep apnea. *Turk Kardiyol Dern Ars* 2011; 39: 292-9.
216. Ugur KS, Ark N, Kurtaran H, et al. Subcutaneous fat tissue thickness of the anterior neck and umbilicus in patients with obstructive sleep apnea. *Otolaryngol Head Neck Surg* 2011; 145: 505-10.
217. Varol E, Ozturk O, Yuçel H, et al. The effects of continuous positive airway pressure therapy on mean platelet volume in patients with obstructive sleep apnea. *Platelets* 2011; 22: 552-6.
218. Akpınar ME, Yigit O, Kocak I, Altundag A. Does the length of uvula affect the palatal implant outcome in the management of habitual snoring? *Laryngoscope* 2011; 121: 1112-6.
219. Acar GO, Yener M, Cansiz H, Acioglu E, Tuziner N. Massive lymphoid hyperplasia presenting with obstructive sleep apnea secondary to lingual and palatine tonsil hyperplasia. *Ear Nose Throat J* 2011; 90: E36.
220. Ucok K, Aycicek A, Sezer M, et al. Resting metabolic rate and anthropometric measurements in male sleep apnea patients. *Intern Med* 2011; 50: 833-8.
221. Erdem E, Ersu R, Karadag B, et al. Effect of night symptoms and disease severity on subjective sleep quality in children with non-cystic-fibrosis bronchiectasis. *Pediatr Pulmonol* 2011; 46: 919-26.
222. Babademez MA, Yurekli MF, Acar B, Karaşen RM. Comparison of the cephalometric posterior airway analysis with endoscopic tongue base hypertrophy findings in patients with obstructive sleep apnea syndrome. *Kulak Burun Bogaz Ihtis Derg* 2011; 21: 80-5.
223. Gül A, Cınar F, Evren C, Uğur MB, Sarıkaya S. The prevalence of allergic rhinitis in patients with simple snoring and obstructive sleep apnea syndrome. *Kulak Burun Bogaz Ihtis Derg* 2011; 21: 70-5.
224. Cilli A, Batmaz F, Demir I, Boz A, Toprak E, Ozdemir T, Peker Y. The diagnostic yield of exercise stress testing as a screening tool for subclinical coronary artery disease in patients with moderate to severe obstructive sleep apnea. *J Clin Sleep Med* 2011; 7: 25-9.
225. Kurt G, Sisman C, Akin E, Akcam T. Cephalometric comparison of pharyngeal airway in snoring and non-snoring patients. *Eur J Dent* 2011; 5: 84-8.
226. Ozmen OA, Tüzemen G, Kasapoğlu F, et al. The reliability of SleepStrip as a screening test in obstructive sleep apnea syndrome. *Kulak Burun Bogaz Ihtis Derg* 2011; 21: 15-9.
227. Sezen OS, Aydın E, Eraslan G, Haytuglu S, Coskuner T, Unver S. Modified tongue base suspension for multilevel or single level obstructions in sleep apnea: clinical and radiologic results. *Auris Nasus Larynx* 2011; 38: 487-94.

228. Ciftci TU, Kokturk O, Demirtas S, Gulbahar O, Bukan N. Consequences of hypoxia-reoxygenation phenomena in patients with obstructive sleep apnea syndrome. *Ann Saudi Med* 2011; 31: 14-8.
229. Kanbay A, Kaya E, Buyukoglan H, et al. Serum gamma-glutamyl transferase activity is an independent predictor for cardiovascular disease in obstructive sleep apnea syndrome. *Respir Med* 2011; 105: 637-42.
230. Ismailogullari S, Korkmaz C, Peker Y, et al. Impact of long-term gonadotropin replacement treatment on sleep in men with idiopathic hypogonadotropic hypogonadism. *J Sex Med* 2011; 8: 2090-7.
231. Akpınar ME, Celikoyar MM, Altundag A, Kocak I. The comparison of cephalometric characteristics in nonobese obstructive sleep apnea subjects and primary snorers cephalometric measures in nonobese OSA and primary snorers. *Eur Arch Otorhinolaryngol* 2011; 268: 1053-9.
232. Ozol D, Turkay C, Kasapoglu B, Karamanlı H, Yıldırım Z. Relationship between components of metabolic syndrome and polysomnographic findings in obstructive sleep apnea. *Metab Syndr Relat Disord* 2011; 9: 13-8.
233. Sarac F, Basoglu OK, Gunduz C, Bayrak H, Biray Avci C, Akcicek F. Association of osteopontin and tumor necrosis factor- α levels with insulin resistance in obese patients with obstructive sleep apnea syndrome. *J Endocrinol Invest* 2011; 34: 528-33.
234. Ozeke O, Ozer C, Gungor M, Celenk MK, Dincer H, Ilcin G. Chronic intermittent hypoxia caused by obstructive sleep apnea may play an important role in explaining the morbidity-mortality paradox of obesity. *Med Hypotheses* 2011; 76: 61-3.
235. Levent E, Sarıman N. Analysis of obstructive sleep apnea patients with "sawtooth sign" on the flow-volume curve. *Sleep Breath* 2011; 15: 357-65.
236. Ozol D, Carlıoğlu A, Karamanlı H, Akgedik R, Karakurt F, Yıldırım Z. Influence of snoring on microalbuminuria in diabetic patients. *Sleep Breath* 2011; 15: 295-300.
237. Sarıman N, Levent E, Cubuk R, Yurtlu S, Benli Aksungar F. Bronchial hyperreactivity and airway wall thickening in obstructive sleep apnea patients. *Sleep Breath* 2011; 15: 341-50.
238. Vatansever E, Surmen-Gur E, Ursavas A, Karadag M. Obstructive sleep apnea causes oxidative damage to plasma lipids and proteins and decreases adiponectin levels. *Sleep Breath* 2011; 15: 275-82.
239. Ayrım A, Keskin EA, Ozol D, Onaran Y, Yüldirim Z, Kafalı H. Influence of self-reported snoring and witnessed sleep apnea on gestational hypertension and fetal outcome in pregnancy. *Arch Gynecol Obstet* 2011; 283: 195-9.
240. Sengul YS, Ozalevli S, Oztura I, Itil O, Baklan B. The effect of exercise on obstructive sleep apnea: a randomized and controlled trial. *Sleep Breath* 2011; 15: 49-56.
241. Gursel G, Aydogdu M, Gulbas G, Ozkaya S, Tasyurek S, Yildirim F. The influence of severe obesity on non-invasive ventilation (NIV) strategies and responses in patients with acute hypercapnic respiratory failure attacks in the ICU. *Minerva Anestesiol* 2011; 77: 17-25.
242. Kurtipek O, Isik B, Arslan M, Unal Y, Kizil Y, Kemaloglu Y. A study to investigate the relationship between difficult intubation and prediction criterion of difficult intubation in patients with obstructive sleep apnea syndrome. *J Res Med Sci* 2012; 17: 615-20.
243. Akhan G, Ayik S, Songu M. Cerebral oxygenation during sleep in patients with obstructive sleep apnea: a near-infrared spectroscopy study. *J Otolaryngol Head Neck Surg* 2012; 41: 437-42.
244. Oztürk E, Dursunoğlu N, Dursunoğlu D, Ozkurt S, Rota S. Evaluation of serum adiponectin levels in patients with obstructive sleep apnea syndrome. *Turk Kardiyol Dern Ars* 2012; 40: 505-12.
245. Yurtlu Ş, Sarıman N, Levent E, Soylu AC, Alparslan S, Saygi A. Short-term positive airway pressure therapy response in obstructive sleep apnea patients: impact of treatment on the quality of life. *Tuberk Toraks* 2012; 60: 327-35.
246. Sencimen M, Bayar GR, Akcam T, et al. Management of obstructive sleep apnea by maxillomandibular advancement surgery in an edentulous patient. *J Craniofac Surg* 2012; 23: e582-5.
247. Duru S, Hikmet Fırat I, Colak N, Giniş Z, Delibaşı T, Ardiç S. Serum S100B protein: a useful marker in obstructive sleep apnea syndrome. *Neurol Neurochir Pol* 2012; 46: 450-5.
248. Ceylan T, Fırat H, Kuran G, Ardiç S, Bilgin E, Celenk F. Quick Diagnosis in Obstructive Sleep Apnea Syndrome: WatchPAT-200. *Iran Red Crescent Med J* 2012; 14: 475-8.
249. Kılınç Y, Işık B. Dental treatment of a patient with central sleep apnea and phobic anxiety under sedation: report of a case and clinical considerations. *Oral Surg Oral Med Oral Pathol Oral Radiol* 2012; 114: e9-11.
250. Kezban OS, Ali NA, Umran T, et al. Is obstructive sleep apnea syndrome a risk factor for pulmonary thromboembolism? *Chin Med J (Engl)* 2012; 125: 3712-8.
251. Sökücü SN, Karasulu L, Dalar L, et al. Can red blood cell distribution width predict severity of obstructive sleep apnea syndrome? *J Clin Sleep Med* 2012; 8: 521-5.
252. Polat M, Sakinci O, Ersoy B, Sezer RG, Yılmaz H. Assessment of sleep-related breathing disorders in patients with duchenne muscular dystrophy. *J Clin Med Res* 2012; 4: 332-7.
253. Karamanlı H, Ozol D, Ugur KS, et al. Influence of CPAP treatment on airway and systemic inflammation in OSAS patients. *Sleep Breath* 2014; 18: 251-6.
254. Tunçel U, Inançlı HM, Kürkçüoğlu SS, Enoz M. A comparison of unilevel and multilevel surgery in obstructive sleep apnea syndrome. *Ear Nose Throat J* 2012; 91: E13-8.
255. Karataylı-Özgürsoy S, Demireller A. Hyoid suspension surgery with UPPP for the treatment of hypopharyngeal airway obstruction in obstructive sleep apnea. *Ear Nose Throat J* 2012; 91: 358-64.

256. Balci MM, Arslan U, Firat H, et al. Serum levels of adipocyte fatty acid-binding protein are independently associated with left ventricular mass and myocardial performance index in obstructive sleep apnea syndrome. *J Investig Med* 2012; 60: 1020-6.
257. Baysal E, Taysi S, Aksoy N, et al. Serum paraoxonase, arylesterase activity and oxidative status in patients with obstructive sleep apnea syndrome (OSAS). *Eur Rev Med Pharmacol Sci* 2012; 16: 770-4.
258. Buyukaydin B, Akkoyunlu ME, Kazancioglu R, et al. The effect of sleep apnea syndrome on the development of diabetic nephropathy in patients with type 2 diabetes. *Diabetes Res Clin Pract* 2012; 98: 140-3.
259. Ugur MG, Boynukalin K, Atak Z, Ustuner I, Atakan R, Baykal C. Sleep disturbances in pregnant patients and the relation to obstetric outcome. *Clin Exp Obstet Gynecol* 2012; 39: 214-7.
260. Tulmaç M, Tireli E, Ebinç H, et al. Effect of overnight nasal continuous positive airway pressure treatment on the endothelial function in patients with obstructive sleep apnea. *Anadolu Kardiyol Derg* 2012; 12: 560-5.
261. Karabag T, Aydın M, Altın R, et al. Evaluation of atrial electromechanical delay and left atrial mechanical function in patients with obstructive sleep apnea: Cardiac involvement in patients with OSA. *Wien Klin Wochenschr* 2012; 124: 444-52.
262. Bozkurt NC, Karbek B, Cakal E, Firat H, Ozbek M, Delibasi T. The association between severity of obstructive sleep apnea and prevalence of Hashimoto's thyroiditis. *Endocr J* 2012; 59: 981-8.
263. Sagit M, Korkmaz F, Kavugudurmaz M, Somdas MA. Impact of septoplasty on mean platelet volume levels in patients with marked nasal septal deviation. *J Craniofac Surg* 2012; 23: 974-6.
264. Ozcan KM, Ozdas T, Ozdoğan F, et al. Inconsistency of the Epworth sleepiness scale results with the polysomnography findings in patients with sleep-disordered breathing. *Kulak Burun Bogaz Ihtis Derg* 2012; 22: 195-9.
265. Akpınar ME, Yigit O, Altundag A, Demirel GY, Kocak I. Salivary and serum myeloperoxidase in obstructive sleep apnea. *J Otolaryngol Head Neck Surg* 2012; 41: 215-21.
266. Eryılmaz A, Erişen L, Demir UL, et al. Management of patients with coexisting obstructive sleep apnea and laryngopharyngeal reflux disease. *Eur Arch Otorhinolaryngol* 2012; 269: 2575-80.
267. Altintas N, Aslan E, Helvacı A, Malhotra A. Relationship between obstructive sleep apnea severity index and left ventricular function and volume. *Ann Saudi Med* 2012; 32: 384-90.
268. Akcam T, Arslan HH, Deniz S, et al. Comparison of early postoperative pain among surgical techniques for obstructive sleep apnea. *Eur Arch Otorhinolaryngol* 2012; 269: 2433-40.
269. Bal K, Ayik S, Issi Y, et al. Sleep analysis of patients with nocturia and benign prostatic obstruction. *Urology* 2012; 80: 383-8.
270. Kilicaslan F, Tokatli A, Ozdag F, et al. Tp-e interval, Tp-e/QT ratio, and Tp-e/QTc ratio are prolonged in patients with moderate and severe obstructive sleep apnea. *Pacing Clin Electrophysiol* 2012; 35: 966-72.
271. Uyar M, Elbek O, Mete A, Bayram N, Çiftçi N, Gündoğdu N, Dikensoy Ö. Factors influencing compliance with continuous positive airway pressure ventilation in obstructive sleep apnea syndrome. *Tuberk Toraks* 2012; 60: 47-51.
272. Lakadamyalı H, Fırat Güven S, Çiftçi B, Öner Eyüboğlu F. Rapid eye movement related obstructive sleep apnea syndrome: antropometric and polysomnographic findings. *Tuberk Toraks* 2012; 60: 13-9.
273. Onder NS, Akpınar ME, Yigit O, Gor AP. Watch peripheral arterial tonometry in the diagnosis of obstructive sleep apnea: influence of aging. *Laryngoscope* 2012; 122: 1409-14.
274. Karakoc O, Akcam T, Gerek M, Genc H, Ozgen F. The upper airway evaluation of habitual snorers and obstructive sleep apnea patients. *ORL J Otorhinolaryngol Relat Spec* 2012; 74: 136-40.
275. Karasulu L, Dalar L, Sökücü S, Altın S. Heart rate variability analysis of single-channel electrocardiogram can help to differentiate high-risk patients with obstructive sleep apnea syndrome - a study on diagnostic accuracy. *Anadolu Kardiyol Derg* 2012; 12: 331-8.
276. Gokce SM, Gorgulu S, Gokce HS, et al. Changes in posterior airway space, pulmonary function and sleep quality, following bimaxillary orthognathic surgery. *Int J Oral Maxillofac Surg* 2012; 41: 820-9.
277. Bulcun E, Ekici A, Ekici M. Quality of life and metabolic disorders in patients with obstructive sleep apnea. *Clin Invest Med* 2012; 35: E105-13.
278. Altekin RE, Yanıkoğlu A, Karakaş MS, Ozel D, Yıldırım AB, Kabukçu M. Evaluation of subclinical left ventricular systolic dysfunction in patients with obstructive sleep apnea by automated function imaging method; an observational study. *Anadolu Kardiyol Derg* 2012; 12: 320-30.
279. Altekin RE, Karakas MS, Yanikoglu A, et al. Determination of right ventricular dysfunction using the speckle tracking echocardiography method in patients with obstructive sleep apnea. *Cardiol J* 2012; 19: 130-9.
280. Ozeke O, Gungor M, Ertan C, et al. Association of sleep apnea with coronary slow-flow phenomenon. *J Cardiovasc Med (Hagerstown)* 2012; 13: 376-80.
281. Hayirci E, Yagci A, Palamar M, Basoglu OK, Veral A. The effect of continuous positive airway pressure treatment for obstructive sleep apnea syndrome on the ocular surface. *Cornea* 2012; 31: 604-8.
282. Dursunoğlu D, Dursunoğlu N. Non-invasive mechanical ventilation therapy in patients with heart failure. *Anadolu Kardiyol Derg* 2012; 12: 261-8.
283. Pişkin B, Sipahi C, Köse M, Karakoç Ö, Şevketbeyoğlu H, Ataç GK. Use of an individual mandibular advancement

- device for an? Obstructive sleep apnoea patient with facial paralysis: a short-term follow-up case report. *J Oral Rehabil* 2012; 39: 472-8.
284. Altekin RE, Yanikoglu A, Baktir AO, et al. Assessment of subclinical left ventricular dysfunction in obstructive sleep apnea patients with speckle tracking echocardiography. *Int J Cardiovasc Imaging* 2012; 28: 1917-30.
285. Ozsu S, Abul Y, Gulsoy A, Bulbul Y, Yaman S, Ozlu T. Red cell distribution width in patients with obstructive sleep apnea syndrome. *Lung* 2012; 190: 319-26.
286. Civelek S, Emre IE, Dizdar D, et al. Comparison of conventional continuous positive airway pressure to continuous positive airway pressure titration performed with sleep endoscopy. *Laryngoscope* 2012; 122: 691-5.
287. Tatlıpınar A, Biteker M, Meriç K, Bayraktar Gİ, Tekkeşin Aİ, Gökçeer T. Adenotonsillar hypertrophy: correlation between obstruction types and cardiopulmonary complications. *Laryngoscope* 2012; 122: 676-80.
288. Bozkurt NC, Cakal E, Sahin M, et al. The relation of serum 25-hydroxyvitamin-D levels with severity of obstructive sleep apnea and glucose metabolism abnormalities. *Endocrine* 2012; 41: 518-25.
289. Tanyeri H, Polat S, Kirişoğlu CE, Serin GM. Long-term efficacy of submucosal uvulopalatopharyngoplasty for obstructive sleep apnea syndrome. *Eur Arch Otorhinolaryngol* 2012; 269: 2069-74.
290. Altekin RE, Yanikoglu A, Karakas MS, et al. Assessment of left atrial dysfunction in obstructive sleep apnea patients with the two dimensional speckle-tracking echocardiography. *Clin Res Cardiol* 2012; 101: 403-13.
291. Saka C, Vuralkan E, Fırat IH, et al. The effects of CPAP treatment on nasal mucosa in patients with obstructive sleep apnea. *Eur Arch Otorhinolaryngol* 2012; 269: 2065-7.
292. Ucar ZZ, Cirak AK, Olcay S, et al. Association of duration of sleep and cardiovascular and metabolic comorbidities in sleep apnea syndrome. *Sleep Disord* 2012; 2012: 316232.
293. Bulcun E, Ekici M, Ekici A. Disorders of glucose metabolism and insulin resistance in patients with obstructive sleep apnoea syndrome. *Int J Clin Pract* 2012; 66: 91-7.7.
294. Basoglu OK, Midilli M, Midilli R, Bilgen C. Adherence to continuous positive airway pressure therapy in obstructive sleep apnea syndrome: effect of visual education. *Sleep Breath* 2012; 16: 1193-200.
295. Soylu AC, Levent E, Sarıman N, Yurtlu S, Alparslan S, Saygi A. Obstructive sleep apnea syndrome and anthropometric obesity indexes. *Sleep Breath* 2012; 16: 1151-8.
296. Çiçek D, Lakadamyali H, Gökay S, Sapmaz I, Muderrisoglu H. Effect of obstructive sleep apnea on heart rate, heart rate recovery and QTc and P-wave dispersion in newly diagnosed untreated patients. *Am J Med Sci* 2012; 344: 180-5.
297. Basoglu OK, Tasbakan MS. Determination of new prediction formula for nasal continuous positive airway pressure in Turkish patients with obstructive sleep apnea syndrome. *Sleep Breath* 2012; 16: 1121-7.
298. Benbir G, Karadeniz D. A pilot study of the effects of non-invasive mechanical ventilation on the prognosis of ischemic cerebrovascular events in patients with obstructive sleep apnea syndrome. *Neurol Sci* 2012; 33: 811-8.
299. Tascilar NF, Tekin NS, Ankarali H, et al. Sleep disorders in Behçet's disease, and their relationship with fatigue and quality of life. *J Sleep Res* 2012; 21: 281-8.
300. Tutuncu R, Karabulut H, Acar B, et al. Obstructive sleep apnea syndrome (OSAS) and social support in elder patients. *Arch Gerontol Geriatr* 2012; 55: 244-6.
301. Türkay C, Ozol D, Kasapoğlu B, Kirbas I, Yıldırım Z, Yiğitoğlu R. Influence of obstructive sleep apnea on fatty liver disease: role of chronic intermittent hypoxia. *Respir Care* 2012; 57: 244-9.
302. Suftioğlu M, Ozmen OA, Kasapoglu F, et al. The efficacy of nasal surgery in obstructive sleep apnea syndrome: a prospective clinical study. *Eur Arch Otorhinolaryngol* 2012; 269: 487-94.
303. Ozeke O, Erturk O, Gungor M, et al. Influence of the right- versus left-sided sleeping position on the apnea-hypopnea index in patients with sleep apnea. *Sleep Breath* 2012; 16: 617-20.
304. Babademez MA, Günbey E, Acar B, Günbey HP. A rare cause of obstructive sleep apnea syndrome: lingual thyroid. *Sleep Breath* 2012; 16: 305-8.
305. Kanbay A, Buyukoglan H, Ozdogan N, et al. Obstructive sleep apnea syndrome is related to the progression of chronic kidney disease. *Int Urol Nephrol* 2012; 44: 535-9.
306. Guven SF, Turkkani MH, Ciftci B, Ciftci TU, Erdogan Y. The relationship between high-sensitivity C-reactive protein levels and the severity of obstructive sleep apnea. *Sleep Breath* 2012; 16: 217-21.
307. Algin O, Gokalp G, Ocakoglu G, et al. Neurochemical-structural changes evaluation of brain in patients with obstructive sleep apnea syndrome. *Eur J Radiol* 2012; 81: 491-5.
308. Beki TT, Kayrak M, Kiyici A, et al. The relation between Lp-PLA2 levels with periodic limb movements. *Sleep Breath* 2012; 16: 117-22.
309. Yagmur J, Yetkin O, Cansel M, Acikgoz N, Ermis N, Karakus Y, Tasolar H. Assessment of atrial electromechanical delay and influential factors in patients with obstructive sleep apnea. *Sleep Breath* 2012; 16: 83-8.
310. Sarıman N, Koca Ö, Boyacı Z, et al. Microscopic bilateral posterior cordotomy in severe obstructive sleep apnea syndrome with bilateral vocal cord paralysis. *Sleep Breath* 2012; 16: 17-22.
311. Akşahin M, Aydın S, Fırat H, Eroğul O. Artificial apnea classification with quantitative sleep EEG synchronization. *J Med Syst* 2012; 36: 139-44.

312. Ugur KS, Kurtaran H, Ark N, Kizilbulut G, Yuksel A, Gunduz M. Comparing anterior palatoplasty and modified uvulopalatopharyngoplasty for primary snoring patients: preliminary results. *B-ENT* 2013; 9: 285-91.
313. Kutbay Özçelik H, Akkoyunlu ME, et al. The frequency and properties of REM related obstructive sleep apnea among the patients with mild related obstructive sleep apnea. *Tuberk Toraks* 2013; 61: 283-7.
314. Kızılgöz V, Aydın H, Tatar IG, et al. Proton magnetic resonance spectroscopy of periventricular white matter and hippocampus in obstructive sleep apnea patients. *Pol J Radiol* 2013; 78: 7-14.
315. Aslan K, Deniz A, Cayli M, Bozdemir H, Sarica Y, Seydaoglu G. Early left ventricular functional alterations in patients with obstructive sleep apnea syndrome. *Cardiol J* 2013; 20: 519-25.
316. Boyacı H, Gacar K, Barış SA, et al. Positive airway pressure device compliance of the patients with obstructive sleep apnea syndrome. *Adv Clin Exp Med* 2013; 22: 809-15.
317. Koseoglu HI, Altunkas F, Demir O, et al. Serum levels of gamma-glutamyl transferase are associated with cardiovascular disease in obstructive sleep apnea syndrome. *Ann Saudi Med* 2013; 33: 584-90.
318. Ozdemir C, Conkbayır I, Kuru A, et al. Correlation between the intima-media thickness and Framingham risk score in patients with sleep apnea syndrome. *J Thorac Dis* 2013; 5: 751-7.
319. Adam M, Okka M, Yosunkaya S, Bozkurt B, Kerimoğlu H, Turan M. The evaluation of retinal nerve fiber layer thickness in patients with obstructive sleep apnea syndrome. *J Ophthalmol* 2013; 2013: 292158.
320. Esquinas AM, Özyılmaz E, Pravinkumar E. Obstructive sleep apnea and asthma: is it just a matter of CPAP. *Tuberk Toraks* 2013; 61: 250-1.
321. Bulcun E, Ekici M, Ekici A, et al. Bronchial hyperresponsiveness in patients with obstructive sleep apnea syndrome. *Tuberk Toraks* 2013; 61: 221-6.
322. Özkurt S, Öztürk E, Yıldız AI, et al. Psychiatric evaluation in patients with obstructive sleep apnea syndrome. *Tuberk Toraks* 2013; 61: 216-20.
323. Ugur KS, Ark N, Kurtaran H, Kizilbulut G, Yuksel A, Gunduz M. Anterior palatoplasty for selected mild and moderate obstructive sleep apnea: preliminary results. *Eur Arch Otorhinolaryngol* 2014; 271: 1777-83.
324. Vuralkan E, Mutlu M, Firat IH, et al. Changes in serum levels of MDA and MMP-9 after UPF in patients with OSAS. *Eur Arch Otorhinolaryngol* 2014; 271: 1329-34.
325. Ankişhan H, Yılmaz D. Comparison of SVM and AN-FIS for snore related sounds classification by using the largest Lyapunov exponent and entropy. *Comput Math Methods Med* 2013; 2013: 238937.
326. Bayır PT, Demirkan B, Bayır O, et al. Impact of Continuous Positive Airway Pressure Therapy on Atrial Electromechanical Delay and P-Wave Dispersion in Patients with Obstructive Sleep Apnea. *Ann Noninvasive Electroradiol* 2014; 19: 226-33.
327. Ulasli SS, Gunay E, Koyuncu T, et al. Predictive value of Berlin Questionnaire and Epworth Sleepiness Scale for obstructive sleep apnea in a sleep clinic population. *Clin Respir J* 2014; 8: 292-6.
328. Erdem A, Dogan OT, Yontar OC, et al. The pure effects of obstructive sleep apnea syndrome on cardiac autonomic functions: heart rate turbulence analysis. *Eur Rev Med Pharmacol Sci* 2013; 17: 2778-83.
329. Araz O, Yilmazel Ucar E, Yalcin A, et al. The incidence and severity of pulmonary hypertension in obstructive sleep apnea with hypothyroidism. *Med Sci Monit* 2013; 19: 883-7.
330. Kurt OK, Tosun M, Alcelik A, et al. Serum omentin levels in patients with obstructive sleep apnea. *Sleep Breath* 2014; 18: 391-5.
331. Akkoyunlu ME, Ilhan MM, Bayram M, et al. Does hormonal control obviate positive airway pressure therapy in acromegaly with sleep-disordered breathing? *Respir Med* 2013; 107: 1803-9.
332. Basoglu OK, Tasbakan MS. Comparison of clinical characteristics in patients with obesity hypoventilation syndrome and obese obstructive sleep apnea syndrome: a case-control study. *Clin Respir J* 2014; 8: 167-74.
333. Alkan A, Sharifov R, Akkoyunlu ME, et al. MR spectroscopy features of brain in patients with mild and severe obstructive sleep apnea syndrome. *Clin Imaging* 2013; 37: 989-92.
334. Taskin U, Yigit O, Sisman AS, et al. Analysis of the vertebralbasilar system in patients with obstructive sleep apnea. *Ear Nose Throat J* 2013; 92: E25.
335. Yücege M, Fırat H, Kuyucu M, Ardiç S. Rapid eye movement dependent central apnea with periodic leg movements. *Ann Indian Acad Neurol* 2013; 16: 154-6.
336. Akyuz A, Oran M, Alpsoy S, et al. Association Between Serum Fetuin-A levels, Carotid Artery Stiffness, and Intima-Media Thickness in Patients With Normotensive Obstructive Sleep Apnea Syndrome. *Angiology* 2013; 65: 607-13.
337. Acar M, Cingi C, Sakallioğlu O, San T, Fatih Yimenicioğlu M, Bal C. The effects of mometasone furoate and desloratadine in obstructive sleep apnea syndrome patients with allergic rhinitis. *Am J Rhinol Allergy* 2013; 27: e113-6.
338. Kanbay A, Tutar N, Kaya E, et al. Mean platelet volume in patients with obstructive sleep apnea syndrome and its relationship with cardiovascular diseases. *Blood Coagul Fibrinolysis* 2013; 24: 532-6.
339. Kurt OK, Tosun M, Talay F. Serum cardiotrophin-1 and IL-6 levels in patients with obstructive sleep apnea syndrome. *Inflammation* 2013; 36: 1344-7.
340. Aksoy EA, Serin GM, Polat S, et al. The morphology of the nasopharyngeal inlet in obstructive sleep apnea. *Eur Arch Otorhinolaryngol* 2014; 271: 771-5.

341. Emin Akkoyunlu M, Kart L, et al. Brain diffusion changes in obstructive sleep apnoea syndrome. *Respiration* 2013; 86: 414-20.
342. Koseoglu S, Ikinciogullari A, Cetin MA, Uysal GS, Kum RO, Arli B. The clinical efficiency of positive airway pressure treatment. *ScientificWorldJournal* 2013; 2013: 245476.
343. Ekinci M, Huseyinoglu N, Cagatay HH, Ceylan E, Keles S, Gokce G. Is there a relationship between sleep apnea and central corneal thickness? *Curr Eye Res* 2013; 38: 1104-9.
344. Hızlı Ö, Özcan M, Ünal A. Evaluation of comorbidities in patients with OSAS and simple snoring. *ScientificWorldJournal* 2013; 2013: 709292.
345. Dusak A, Ursavas A, Hakyemez B, Gokalp G, Taskapilioglu O, Parlak M. Correlation between hippocampal volume and excessive daytime sleepiness in obstructive sleep apnea syndrome. *Eur Rev Med Pharmacol Sci* 2013; 17: 1198-204.
346. Ozcan KM, Ozcan M, Ozdogan F, Hizli O, Dere H, Unal A. The predictive value of Muller maneuver in REM-dependent obstructive sleep apnea. *Eur Arch Otorhinolaryngol* 2013; 270: 2759-62.
347. Yucege M, Firat H, Demir A, Ardic S. Reliability of the Watch-PAT 200 in detecting sleep apnea in highway bus drivers. *J Clin Sleep Med* 2013; 9: 339-44.
348. Altıntaş N, Firat H. Adherence problems during CPAP usage and solutions. *Tuberk Toraks* 2013; 61: 63-70.
349. Akkoyunlu ME, Kart L, Uludağ M, et al. [Relationship between symptoms of obstructive sleep apnea syndrome and traffic accidents in the city drivers]. *Tuberk Toraks* 2013; 61: 33-7.
350. Mete T, Yalcin Y, Berker D, et al. Relationship between obstructive sleep apnea syndrome and thyroid diseases. *Endocrine* 2013; 44: 723-8.
351. Pihtili A, Bingol Z, Kiyan E, Cuhadaroglu C, Issever H, Gulbaran Z. Obstructive sleep apnea is common in patients with interstitial lung disease. *Sleep Breath* 2013; 17: 1281-8.
352. Mete T, Yalcin Y, Berker D, et al. Obstructive sleep apnea syndrome and its association with vitamin D deficiency. *J Endocrinol Invest* 2013; 36: 681-5.
353. Sivri B, Sezen OS, Akbulut S, Coskuner T. The effect of continuous positive airway pressure on middle ear pressure. *Laryngoscope* 2013; 123: 1300-4.
354. Oğuz AS, Gümüşşoy M, Cukurova I. Long-term results of transnasal radiofrequency in patients with obstructive sleep apnea syndrome. *Kulak Burun Bogaz Ihtis Derg* 2013; 23: 1-9.
355. Karakaş MS, Altekin RE, Baktır AO, et al. Association between mean platelet volume and severity of disease in patients with obstructive sleep apnea syndrome without risk factors for cardiovascular disease. *Turk Kardiyol Dern Ars* 2013; 41: 14-20.
356. Apaydin M, Ayik SO, Akhan G, Peker S, Uluc E. Carotid intima-media thickness increase in patients with habitual simple snoring and obstructive sleep apnea syndrome is associated with metabolic syndrome. *J Clin Ultrasound* 2013; 41: 290-6.
357. Salepci B, Caglayan B, Kiral N, et al. CPAP adherence of patients with obstructive sleep apnea. *Respir Care* 2013; 58: 1467-73.
358. Tulek B, Atalay NB, Kanat F, Suerdem M. Attentional control is partially impaired in obstructive sleep apnea syndrome. *J Sleep Res* 2013; 22: 422-9.
359. Ozben S, Guvenç TS, Huseyinoglu N, et al. Low serum copeptin levels in patients with obstructive sleep apnea. *Sleep Breath* 2013; 17: 1187-92.
360. Ahabab S, Ataoglu HE, Tuna M, et al. Neck circumference, metabolic syndrome and obstructive sleep apnea syndrome; evaluation of possible linkage. *Med Sci Monit* 2013; 19: 111-7.
361. Guven SF, Ciftci B, Lakadamyali H, Ciftci TU. The high dependency of supine position in obstructive sleep apnea. *Saudi Med J* 2013; 34: 147-52.
362. Akkoyunlu ME, Altın R, Kart L, et al. Investigation of obstructive sleep apnoea syndrome prevalence among long-distance drivers from Zonguldak, Turkey. *Multidiscip Respir Med* 2013; 8: 10.
363. Arik B, Inci MF, Gumus C, et al. Advanced age and apnea-hypopnea index predict subclinical atherosclerosis in patients with obstructive sleep apnea syndrome. *Multidiscip Respir Med* 2013; 8: 9.
364. Ayik S, Gungor H, Ayik MF, et al. Clinical characteristics of obstructive sleep apnea syndrome in heart transplant recipients. *Transplant Proc* 2013; 45: 383-6.
365. Ursavaş A, Güven T, Coskun F, Ege E, Yilmazlar A. Association between self reported snoring, STOP questionnaire and postoperative pulmonary complications in patients submitted to orthopaedic surgery. *Multidiscip Respir Med* 2013; 8: 3.
366. Kurt OK, Yildiz N. The importance of laboratory parameters in patients with obstructive sleep apnea syndrome. *Blood Coagul Fibrinolysis* 2013; 24: 371-4.
367. Bekci TT, Tezer M, Ata N, Emre L. Obstructive sleep apnea syndrome induced by laryngeal lesions: two cases. *Ear Nose Throat J* 2012; 91: E1-3.
368. Karaca Z, Ismailogullari S, Korkmaz S, et al. Obstructive sleep apnoea syndrome is associated with relative hypocortisolemia and decreased hypothalamo-pituitary-adrenal axis response to 1 and 250µg ACTH and glucagon stimulation tests. *Sleep Med* 2013; 14: 160-4.
369. Arda H, Birer S, Aksu M, Ismailogullari S, et al. Obstructive sleep apnoea prevalence in non-arteritic anterior ischaemic optic neuropathy. *Br J Ophthalmol* 2013; 97: 206-9.
370. Oğuztürk Ö, Ekici M, Çimen D, Ekici A, Sentürk E. Attention deficit/hyperactivity disorder in adults with sleep apnea. *J Clin Psychol Med Settings* 2013; 20: 234-9.

371. Tanyeri H, Serin GM, Aksoy EA, Polat S, Cuhadaroglu C. Effect of uvulopalatopharyngoplasty on retropalatal region. *Eur Arch Otorhinolaryngol* 2013; 270: 1161-5.
372. Fidan V, Alp HH, Kalkandelen S, Cingi C. Melatonin and cortisol rhythm in patients with extensive nasal polyposis. *Am J Otolaryngol* 2013; 34: 61-4.
373. Ozdas T, Ozcan KM, Ozdogan F, et al. Investigation of lateral pharyngeal walls in OSAS. *Eur Arch Otorhinolaryngol* 2013; 270: 767-71.
374. Turhan M, Bostancı A, Akdag M, Dinc O. A comparison of the effects of packing or transseptal suture on polysomnographic parameters in septoplasty. *Eur Arch Otorhinolaryngol* 2013; 270: 1339-44
375. Tanyeri H, Serin GM, Polat S, Aksoy E, Cuhadaroglu C. Quantification of retropalatal region in obstructive sleep apnea. *J Craniofac Surg* 2012; 23: 1410-3.
376. Mungan U, Ozeke O, Mavioglu L, et al. The role of the preoperative screening of sleep apnoea by Berlin Questionnaire and Epworth Sleepiness Scale for postoperative atrial fibrillation. *Heart Lung Circ* 2013; 22: 38-42.
377. Nural S, Günay E, Halici B, Celik S, Ünlü M. Inflammatory processes and effects of continuous positive airway pressure (CPAP) in overlap syndrome. *Inflammation* 2013; 36: 66-74.
378. Uyar M, Davutoğlu V, Aydın N, Filiz A. Comparison of metabolic syndrome with growing epidemic syndrome Z in terms of risk factors and gender differences. *Sleep Breath* 2013; 17: 647-51.
379. Acar M, Firat H, Acar U, Ardic S. Ocular surface assessment in patients with obstructive sleep apnea-hypopnea syndrome. *Sleep Breath* 2013; 17: 583-8.
380. Cinar AB, Oktay I, Schou L. Relationship between oral health, diabetes management and sleep apnea. *Clin Oral Investig* 2013; 17: 967-74.
381. Okur HK, Pelin Z, Yuksel M, Yosunkaya S. Lipid peroxidation and paraoxonase activity in nocturnal cyclic and sustained intermittent hypoxia. *Sleep Breath* 2013; 17: 365-71.
382. Uzkeser H, Yildirim K, Aktan B, et al. Bone mineral density in patients with obstructive sleep apnea syndrome. *Sleep Breath* 2013; 17: 339-42.
383. Ekici A, Ekici M, Oğuztürk O, Karaboğa I, Cimen D, Sentürk E. Personality profiles in patients with obstructive sleep apnea. *Sleep Breath* 2013; 17: 305-10.
384. Ak M, Balıkcı A, Haciomeroglu B, et al. Quality of sexual life in men with obstructive sleep apnoea. *J Health Psychol* 2013; 18: 245-51.
385. Karaca S, Fidan F, Erkan F, et al. Might psoriasis be a risk factor for obstructive sleep apnea syndrome? *Sleep Breath* 2013; 17: 275-80.
386. Cilli A, Uzun R, Bilge U. The accuracy of autotitrating CPAP-determined residual apnea-hypopnea index. *Sleep Breath* 2013; 17: 189-93.
387. Abaci A, Catli G, Bayram E, et al. A case of rapid-onset obesity with hypothalamic dysfunction, hypoventilation, autonomic dysregulation, and neural crest tumor: ROHHADNET syndrome. *Endocr Pract* 2013; 19: e12-6.
388. Elliot J. Obstructive sleep apnea in Georgia family: is it hereditary? *JAMA* 1978; 240: 2611.
389. Shapiro CM, Catterall JR, Oswald I, Flenley DC. Where are the British sleep apnoea patients? *Lancet* 1981; 2: 523.
390. Peter JH, Siegrist J, Podszus T, Mayer J, Selzer K, von Wichert P. Prevalence of sleep apnea in healthy industrial workers. *Klin Wochenschr.* 1985; 63: 807-11.