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English title, author names and institutions.
Abstract (average 200-400 word)
Introduction
Methods
Results
Discussion and conclusion
References (most 30)
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Results
Discussion and conclusion
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Case report
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Conclusion
References (most 35)
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Conclusion
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Topics related to the subject.
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References (3-5 inter)

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300 words of text and original images about the subject

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EDITORIAL

About the second issue...

We are in happiness as we achieve to perform our goal including publications from all areas of health sciences which are in our journal plans significantly. In our first issue, we had publications in the field of healths. Also, in our second issue we tried to create an internationally respected journal with a similar editorial policy.

In this issue, there are three original articles; two case report and a review. The articles' branches are Guidance and Psychological Counseling, Orthopedics, Obstetrics and Gynecology, Psychiatry, Nursing and dentistry. While the first original article was reviewing attention hyperactivity according to the teachers' perception, the second was about effect of depressive emotional state on the efficacy of physical therapy and the third was about colposcopic evaluation of pre and postmenopausal women. In addition, the case reports are about an interesting piercing injury of the hip and Burkitt's Lymphoma presenting. The moreover review presented alternative methods in the management of menopausal symptoms

In our journal publications process, I extend my thanks to our authors, article assessment referees, our editorial board members and our technical team for their support.

PhD. Asst. Prof. Ülkü KARAMAN

Director in Charge

See you soon…

Middle Black Sea Journal of Health Science August 2016; 2(2): 1-5

RESEARCH ARTICLE

Attention Deficit and Hyperactivity Disorder According to the Teachers' Perceptions

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Abstract

Objective: The Attention Deficit and Hyperactivity Disorder (ADHD), which is one of the student-related problems at primary education schools, is a major health problem that affects all stakeholders in the education process. In the study, the total number of students with ADHD being educated in primary schools of Ordu province has been targeted. So, the prevalence of the students with ADHD will be determined for the first time after an extensive screening in our country. Furthermore, we have aimed to evaluate the success and compliance status of the students with ADHD according to the teachers' perceptions. With the study, the school compliance and success status of the students with ADHD who were diagnosed and in a treatment at a health facility have been examined.

Methods: The universe of the study is composed of 252 students with ADHD consisting of in total 88 926 students studying at 330 primary schools in Ordu province in 2011-2012 academic years. In the study, the scanning model was used as the method and "The Attention Deficit and Hyperactive Student Determination Form" developed by the researchers was used as tool. The data obtained in the study was carried out through a request text of the governor which was written by Ordu Counseling and Research Center Management and the schools are informed that the forms which are used for tools should be filled and then sent back.

Results: In the statistical evaluation, the prevalence of ADHD has been found as 0.28%. In addition, 156 (62%) of 252 students diagnosed with ADHD have been under medical treatment. It has been determined that 4.2% of these cases related to compliance and success achieved the desired harmony and success but the problems of others continued. On the other hand, it has been determined that only 2.8% of 96 (38%) students with ADHD who could not have medical treatment for various reasons achieved compliance and success.

Conclusion: In the study, the number of children diagnosed with ADHD is 0,28% and it shows us that the students with ADHD cannot be determined largely and the students, teachers and families are in great difficulties. In addition, it is significant that the diagnosed students can not have enough support. On the other hand, the status of untreated students with ADHD despite the medical diagnosis can be attributed to the parents' lack of education, functionality of the treatment and anxiety caused by the side effects of drugs. As a result, some proposals such as to create a strategy for the diagnosis of the students with ADHD all over the country, to configure the school support services besides the medical treatment and to organize parents education program for the families have been presented.

Key words: ADHD, Compliance and Performance, Elementary, Students, Ordu

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Introduction

The Attention Deficit and Hyperactivity Disorder (ADHD), which is one of the student-related problems at primary education schools, is a major health problem that affects all stakeholders in the education process.

It is a disorder in which the symptoms such as hyperactivity incompatible with the level of development of ADHD, difficulties in gathering attention and uncontrolled impulse are observed (Guclu and Erkiran, 2005). According to DSM-IV diagnostic criteria determined by the American Psychiatric Association, disorder must last at least 6 months, symptoms should be appeared at least two environments (home, school, workplace, etc.), problems should start before the age of 7 and academic or social functioning should be disturbing (Ozcan et al., 1998). The children with ADHD need to be monitored in classes, camps, group games and at home (Kaidar et al., 2003). On the other hand, conduct disorder, opposite defiant disorder and specific learning difficulties generally accompany to the ADHD (Conner et al., 2003).

The aim of the study is to determine the prevalence of primary school students received the diagnosis of ADHD in health care organizations (Phase I) and to evaluate the compliance and success status according to teachers' perceptions (Phase II).

In the first stage of the study the prevalence of diagnosed ADHD were investigated. In the researches related to the prevalence of ADHD in the world and our country, the results varying between 1% and 20% have been found (Faraone et al., 2003, Polanczyk et al, 2007; Uyan et al., 2014). According to the countries, the causes of the differences in ADHD prevalence can be attributed to the methodological differences (DSM-ICD differences) in the classification of disease, differences in the diagnostic evaluation or the differences in socio-economic structure of the area of the study (Skounti et al., 2007; Polanczyk et al., 2007; Uyan et al., 2014).

Because of the uncertainty of the prevalence of ADHD and the difficulties in its diagnosing, some challenges have been appeared in the development of large-scale projects and creation of strategies. For the ADHD, a clinical practice guideline was published in 2000 for the first time by the American Academy of Pediatrics. A second guide was published for treatment in January 2001. In these guides, a multidisciplinary approach has been suggested by the pediatricians, developmental pediatricians, child and adolescent psychiatrists, psychologists, child neurologists and family doctors for the diagnosis and treatment of ADHD and it has been emphasized that the information which will be given by the family and school must be evaluated besides the DSM-IV diagnostic criteria for the diagnosis (Barley et al., 2004; Uyan et al., 2014).

With the study, total number of diagnosed with ADHD students studying in the primary schools of Ordu province have been aimed. Thus, the prevalence of diagnosed students with ADHD will be determined for the first time after a large-scale screening in our country.

In the second stage of the study, the evaluation of compliance and success status of the students with ADHD according to the teachers' perceptions has been aimed. The ADHD diagnosis is usually made at school ages. Teachers identify these children as late comers to school, forgetful and as in a dream, as individuals who have difficulty in being organized and cannot complete their homework. Therefore, loss of performance, lack of motivation and comprehension problems lead to success under their intelligence (Tahiroglu et al., 2005). Besides the problems about the success, troubles in compliance have been experienced. Lauth and Mackowiack ADHD have identified the students with ADHD as -destructive in the class environment and they have determined that the students with ADHD show both active damaging behavior (talking continuously with desk mates, scouring in the classroom, wandering around humorously etc.) and passive damaging behavior (looking out of the window, being so busy with other things etc.) more than the other students (Act. Ozmen, 2010). Also, in the foreign studies related to the students with ADHD, it has been suggested that there are behavior problems accompanying with ADHD. It has been determined that the behavior disorder is 50%, social withdrawal, fear and depression are 30-35%, and learning difficulties are 35%. In the studies performed in our country, the rates are 35% in behavior disorders, 25,9% in oppositional behavior and 21.7% in specific learning difficulties (Ozmen, 2010). With the study the school harmony and success of the students with ADHD who were diagnosed and under treatment at a health facility have been investigated.

Methods

In the study general screening model was used as the method. General screening models are "scanning arrangements on the whole universe or a group of samples or sample which will be taken from it in order to arrive at an overall judgement about the universe in a universe composed of numerous elements" (Karasar, 1994). In the research "The Attention Deficit and Hyperactivity Diagnosed Student Determination Form" developed by the researchers was used as the data collection tool.

The form was presented to the evaluation of five faculty members after the pre-development. Then arrangements were made and applied to 42 teachers as a preliminary assessment, it was finalized with rearrangements according to the data obtained. In the first phase of the form, diagnostics institutions where the students with ADHD performed and treatment situations were questioned, in the second phase of the form academic success and compliance situations were evaluated in accordance with the opinion of the class advisor. At this stage, the effects of the discontinuing situations of the students with ADHD to their treatment despite being diagnosed with ADHD or drug treatment for the academic achievement and the school adjustment were examined.

The universe of the study is composed of the students with ADHD studying at primary schools in Ordu province in 2011-2012 academic years. The study is limited with the data obtained from the ADHD forms filled by class guide teachers who have students with ADHD in primary schools in the 2011-2012 academic years.

The data obtained in the study was carried out through a request text of the governor which was written by Ordu Counseling and Research Center Management and the schools are informed that the forms which are used for tools should be filled and then sent back. In the controls in the process of collecting the forms, incomplete and irregular shipments were identified and requested again and it was tried to obtain the entire universe.

Results

The findings obtained in the study are composed of 252 ADHD diagnosed students consisting of a total of 88926 students who study in 330 primary schools of Ordu province in 2011-2012 academic years.

Table 1. The Distribution of ADHD Diagnosed Students According to the Class and Gender

C	F	M	T	C/S	U	C/S
1	6	30	23	1	10	1
2	7	26	20	2	12	-
3	2	32	20	-	8	-
4	5	26	18	1	13	2
5	4	28	22	-	15	-
6	6	24	19	-	12	-
7	3	22	18	2	16	-
8	2	29	16	1	10	-

C= **Classes, F= Female, M= Male, T= Treated, C/S= Compliance/Success, U= Untreated**

In the statistical evaluation the prevalence of ADHD has been found as 0.28%. In the DSM booklet (APA, 1994) the frequency has been projected as 3-5%. In the studies conducted in our country, 2-12% of the school-age children are thought to be affected although there is no definite opinion unity (Kayaalp, 2008).

In addition, 156 (62%) of 252 ADHD diagnosed students have been under medical treatment. It has been determined that 4.2% of them achieved both desired harmony and academic success but the problems of the others have been continued. On the other hand, it has been determined that only 2.8% of 96 (38%) students with ADHD who cannot have medical treatment for various reasons achieved compliance and academic success.

Discussion

According to the data obtained in the research, the number of ADHD diagnosed students is very low. Because the universes of earlier studies are consisted of children admitted to the clinic, ADHD screening conducted in some schools or a few students who were diagnosed with ADHD. But, as the ADHD diagnosed students studying in primary schools of all the villages, towns and districts of the province were identified in the study, the rates may have been lower. This situation can be connected to the diagnostic difficulties because of the socio-economic reasons in villages and towns and the width of the universe. On the other hand, a multidisciplinary work must be for diagnosis of the ADHD. Because, there are difficulties in diagnosing and and therefore observations of parents and teachers play an important role (Ercan and Aydin, 1999). The observation results of the students for both academic success and peer communication and experienced behavior problems

in the school environment are distinguishing (Atkins and Pelham, 2001). Researchers has emphasized that the opinions of teachers play a major role in treatment as well as in diagnostics (Ghanizadeh et al., 2006, Karabekiroglu et al., 2009). But in the study of teachers' knowledge about ADHD, it has been determined that the teachers have insufficient information. Similarly, it has been determined that the families who have children with ADHD do not have adequate knowledge or the information they learn may be incomplete and inaccurate (Aslan, 2013; Gol and Babik, 2013).

Despite the students with ADHD have treatment, their harmony and success situations are not at the desired level, and this can be explained with the lack of knowledge and skills of the families on these subjects and insufficiency of the school support services and the medical treatment. The ADHD treatment should be in scope containing behavioral, cognitive, social and familial areas. As well as drug treatment psychotherapy and psychosocial interventions are essential (Kayaalp, 2008). But the psychotherapy and psychosocial supports have not reached a sufficient level in our country. Meeting of the requirements by the psychotherapy services are not possible according to the conditions of our country. Because, only five of every hundred people can access to mental health professionals in our country (Cam and Engin, 2015).

In the domestic and international studies, it has been reported that the prevalence of ADHD range between 2% and 12%. In the study, the number of children diagnosed with ADHD is 0,28% and it shows us that the students with ADHD cannot be determined largely and the students, teachers and families are in great difficulties. In addition, it is significant that the diagnosed students can not have enough support. On the other hand, the status of untreated students with ADHD despite the medical diagnosis can be attributed to the parents' lack of education, functionality of the treatment and anxiety caused by the side effects of drugs.

Conclusion

As a result, some proposals such as to create a strategy for the diagnosis of the students with ADHD all over the country, to configure the school support services besides the medical treatment and to organize parents education program for the families have been presented.

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RESEARCH ARTICLE

The Effect of Depressive Emotional State on the Efficacy of Physical Therapy in Patients with Low Back Pain

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Abstract

Objective: The aim was to investigate the effect of depressive emotional state on the efficacy of physical therapy in patients with chronic mechanical low back pain (LBP).

Methods: Sixty patients with chronic LBP were included in the study. The patients were evaluated by a psychiatrist according to the Hamilton Depression Rating Scale (HAM-D) and separated into 2 groups regarding the cut off score. Group 1 consisted of 31 patients without depressive emotion while group 2 included 29 patients with depressive emotion. An exercise program consisting of lumbar dynamic stabilization exercises was instructed to all of the patients for 8 weeks. Infrared, ultrasound and TENS were applied to both groups for 15 seance. The pain was evaluated by visual analog scale (VAS), disability and quality of life was evaluated by Oswestry disability index and the Short-Form 36(SF-36) at baseline and 3rd and 8th weeks.

Results: İmprovement at pain severity during ADL, rest and sitting position was found to be significantly higher in group 2 compared to group 1 patients at the 8th week ($p<0.05$). Oswestry scores and some subscale of SF-36; physical functioning, general health perception, vitality, mental health scores of group 2 were significantly higher compared to group 1 at baseline and the 8th week ($p<0.05$). Improvement of Oswestry scores between groups was not significantly different at 8th week ($p>0.05$), but improvement of some SF-36 subscale scores (pain, emotional role functioning, mental health) of groups significantly lower in group 2 compared to group 1 at the 8th weeks ($p<0.05$).

Conclusions: Patients with chronic LBP and a depressive emotional state are inclined to have more disability and poorer quality of life, while physical therapy and exercises yield to less improvement in scores of pain and some subscales of the SF-36 in these patients than those without depressive affect.

Key words: Chronic low back pain, depression, physical therapy

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Introduction

Low back pain (LBP) is a widespread health disorder that occurs during the lifetime of 65-80% of the general population. Although the prognosis is usually good, the management of disability that is associated with LBP presents a challenging problem (Felson 1997; Weinstein et al. 2005). The course of patients with acute mechanical back pain is one of gradual improvement over a 6-week period with total recovery in almost 90%, however pain persists for more than 3 months in 7-10% and develops a chronic character causing serious work

absenteeism and economic loss (Andersson, 1999; Velbaunt et al., 2003; Weinstein et al., 2005). The treatment of LBP initiates with controlled physical activity, prescription of non-steroidal anti-inflamatory drugs (NSAIDs) and myorelaxants, and lumbar supports. If pain does not resolve within a few weeks, a multidisciplinary approach becomes essential and exercises, physical therapy modalities, mobilization, manipulation, acupuncture, and behavioral therapy are utilized as adjunctive procedures (Van Middelkoop et al, 2011; Silvemark et al., 2014).

The treatment of chronic LBP is difficult and longstanding pain causes disability and creates both social and individual restrictions (Andersson, 1999). Although research has demonstrated that physical therapy for back pain can be effective and widely accepted as useful in combination with exercises in coping with pain and providing functional recovery, overall treatment effect sizes have tended to be small, regardless of the treatment modality used (Keller et al 2007; Van Middelkoop et al., 2011; Alkan et al., 2011;). It is argued that one explanation for the small effect sizes might be individual patient variability, both in terms of general prognosis and in terms of response to a specific intervention (Jonathan et al., 2011).

The prevalence of depression was found to be 32.1% in chronic LBP patients and patients with depression had higher pain intensity, greater fear of movement and poorer quality of life (Antunes et al., 2013).

The aim of this study was to compare the response of patients with depressive affect with that of patients without depressive affect to a treatment program of physical therapy modalities and exercises. As far as we know, our study is unique in respect to its design and purpose.

Methods

Seventy five patients admitted to our clinic aged between 30-65 years with chronic LBP for at least 3 months were included in this study. Four of 75 patients diagnosed as major depression by a psychiatrist and had begun antidepressant treatment which would affect the study results were excluded from the study. Eleven patients out of 75 patients were either dropouts or inadequate participation to the physical therapy and/or home exercise program. Sixty patients were completed the study. Neurological deficit, red flags, history of lumbar operation, pregnancy, compression fracture, hip pathology, any contraindication for physical therapy (infection, inflammation or malignancy), exercise intolerance, spinal instability (Spondylolisthesis, spondylolysis, congenital deformity, scoliosis), fibromyalgia, major depression, drug usage for depression were the exclusion criteria of the study.

The patients were evaluated by a psychiatrist according to the Hamilton Depression Rating Scale (HAM-D) and separated into 2 groups regarding the cut off score (normal<7; depressive affect>7) (Akdemir et al., 1996). Group 1 consisted of 31 patients without depressive affect while group 2 included 29 patients with depressive affect. Physical therapists providing care were blinded to the grouping of each patient. Both groups were assigned core stabilization exercises and physical therapy for 3 weeks under physical therapist supervision and continued to perform exercises up to 8th week as home programme. The core stabilization exercises were performed 5 times a week. Compliance with home exercise programme was monitorized by a daily check chart. Patients less than three days a week participatine to the exercise program were excluded from the study.

The program included flexibility and strengthening exercises. For flexibility; hip flexors, gluteals and hamstrings were stretched for 20 seconds, 3 times in each session. For strengthening; a) supine abdominal draw in, b) prone bridging on elbows, c) quadruped opposite arm/leg, d) supine butt lift with arms at side 6 weeks, e) prone Cobra's exercises were performed, each twice a day with 5 to 10 repetitions. Superficial heating with hot packs was applied to the low back region for 20 minutes. The patients also received ultrasound (US) diathermy using an ultrasound device (Chattanooga, Tennessee, USA) that operated at 1 MHz frequency and 2 W/cm2 intensity. The treatment duration was 7 minutes. Finally, transcutaneous electrical nerve stimulation (TENS); 50-100 Hz by means of conventional method was applied for 30 minutes. The physical therapy sessions were applied five times a week for 3 weeks. Patients were allowed to only etafonamat 800mg/day for pain management if necessary.

Age, sex, weight, height and occupation of each patient were noted at baseline evaluation. Body mass index was calculated. Pain duration, existence of radicular pain and paresthesia and lumbar MRI findings were recorded. Both groups were assessed for pain, disability and quality of life before and at

the 3rd week and 8th week follow-up. Low back pain severity during activities of daily living (ADL), at rest and sitting position was assessed by visual analogue scale (VAS, 0: no pain, 10 cm: severe pain) (Dixon and Bird, 1981). Oswestry disability index was used for disability assessment (Fairbank and Pynsent, 2000). Finally, quality of life of the patients was assessed by Short-Form 36 (SF-36) (Kocyigit H et al., 2001).

Statistical evaluation

Data were analyzed using SPSS-15.0 for Windows statistical package. The suitability of the normal distribution of the data was analyzed by normality with plots test. Data without normal distributed were compared by Mann-Whitney test, while data with normal distribution were compared by student t test between groups.

Data about the sociodemographic and clinical characteristics of the groups with nominal values were compared by Chi-square test. The groups were compared as to their response to treatment by ANOVA repeated measures analysis. If baseline comparisons of groups were statistically significantly different, covariate analysis was done. Value of significance was accepted as $p<0.05$ for all tests.

Results

Thirty three (44%) out of 75 patients with chronic LBP had depressive emotional state and 4 of them (5.3%) had major depression. Most of the patients with depressive affect were female (75.9%) (Table 1). Demographic data of groups were given in table 1. Both groups had similar pain duration, age, sex, occupation ratios, and weight, height and body mass index (BMI) values. Groups did not differ in existence of radicular pain and lumbar MRI findings, except symptom of paresthesia (Table 2).

Improvement at pain severity during ADL, rest and sitting position was found to be significantly higher in group 2 compared to group 1 patients at the 8th week ($p<0.05$). Both groups showed significant improvement in all VAS scores compared to baseline (except pain during sitting position in group 2 at the 8th week) at the 3rd and 8th weeks ($p<0.05$) (Table 3). Oswestry scores of group 2 were significantly higher compared to group 1 at baseline and the 8th week ($p<0.05$). When covariance analysis was done for the baseline values, improvement of oswestry scores between groups was not significantly different at 8th week ($p>0.05$). Improvement within groups was achieved only in group 2 at the 3rd week, but only group 1 had significant improvement at the 8th week ($p<0.05$) (Table 4). Some SF-36 subscale scores; pain and emotional role functioning of groups were statistically similar at baseline, and significant improvement was achieved at these scores in group 2 compared to group 1 at the 8th weeks ($p<0.05$). Improvement of physical role functioning and social role scores of SF- 36 were not differing between groups at 8th week. Other subscales of SF-36 (physical functioning, general health perception, vitality, mental health) evaluated at baseline, and 8th weeks were all statistically lower in group 2 patients ($p<0.05$). When covariance analysis was done for the baseline values of these subparameters; improvement of mental health scores was statistically significantly different between groups at the 8th week. But, improvement of social role, physical functioning, general health perception and vitality were not differing between groups at 8th week (Table 5). Significant improvement within groups was achieved in both groups in pain and physical role items at the 3rd week, but only group 1 had significant improvement in physical functioning at the 3rd week and also pain, physical role functioning scores at the 8th week ($p<0.05$).

Discussion

The prevalence of depressive emotional state was found to be 44% in chronic LBP patients and 5.3% of them had major depression. Majority of patients with depressive affect were found to be female. Physical role functioning, general health, vitality and mental health scores were found to be lower in patients with chronic LBP and depressive affect. Oswestry scores that evaluate functional disability associated with back pain have also been found to be poorer in these patients. Longstanding pain leads to impairment in physical activity and quality of life (Bigos et al., 2001). Our study has demonstrated that quality of life deteriorates to a greater extent when depressive affect accompanies pain. The prominent difference in quality of life of patients with similar clinical and radiological findings and pain intensity supports the fact that depressive affect increases disability significantly. While the prevalence of depression is 5-8% in the general population, the prevalence ranges between 22 and 78% in patients with chronic pain (Haythornthwaite et al., 1991).

Table 1: Comparison of Demographic Data of Groups

		Group 1 (n:31)	Group 2 (n:29)	P value*, †
Sex	Men (%)	15(48.4)	7(24.1)	0.051*
	Women (%)	16(51.6)	22(75.9)	
Age(year)		46.16±9.89	46.65±8.19	0.941†
Height(cm)		165.55±9.68	163.69±10.2	0.688†
Weight(kg)		77.7±13.78	76.13±13.85	0.568†
BMI(kg/m²)		28.35±4.54	28.56±5.48	0.684†
Pain duration(month)		65.32±75.80	74.62±67.53	0.619†
Occupation				
House women(%)		14(45.2)	17(58.6)	
Hard worker(%)		9(29)	9(31)	0.292*
Desk job(%)		3(9.7)	0	
Retired(%)		5(16.1)	3(10.3)	
Unemployed(%)		0	0	

*Chi-square and †mann- whitney test

Table 2. Comparison of Clinical Symptoms and Lumbar MRI Findings of Groups

	Group 1(n)(%)	Group 2(n)(%)	P value*
Pain radiating to leg (+/-)	27(87.1)/ 4(12.9)	24(82.8)/5(17.2)	0.638
Parasthesia (+/-)	19(61.3)/ 12(38.7)	25(86.2) /4(13.8)	0.029
Disc pathology	4(12.9)	2(6.9)	
Bulging	25(80.6)	22(75.9)	0.216
Protrusion	1(3.2)	5(17.2)	
Extrusion	1(3.2)	0	
Secestration			
Root compression (+/-)	15(48.4)/ 16(51.6)	8(27.6) /21(72.4)	0.098
Stenosis (+/-)	3(9.7) /28(90.3)	2(6.9) /27(93.1)	0.697

*Chi-square test

Table 3: Comparison of Pain Intensity at Baseline, 3rd and 8th Weeks Between and within Groups

VAS (0-10cm)		Group 1	Group 2	P value
Pain during ADL	baseline	6.64±1.40	7.2±1.49	0.139†
	3.week	3.22±1.83	4.58±2.19	0.000*
		P<0.001	P<0.001	
	8.week	3.54±1.52	5.65±2.07	
		P<0.001	P=0.001	
Pain during rest	baseline	2.93±2.01	3.48±2.18	0.317†
	3.week	0.96±1.53	1.44±1.50	0,039*
		P<0,001	P<0,001	
	8.week	0.77±1.52	2.13±1.84	
		P<0.001	P<0.001	
Pain during sitting	baseline	3.74±1.56	4.10±2.05	0.446†
	3.week	2.12±1.54	2.82±1.81	
		P<0.001	P=0.001	0.000*
	8.week	1.93±1.59	3.65±2.14	
		P<0.001	P=0.196	

*ANOVA repeated measures analysis and student t test†

Table 4: Comparison of Oswestry Scores at Baseline, 3rd and 8th Weeks Between and within Groups

Oswestry scores	Group 1	Group 2	P value
Baseline	46.38±13.99	58.48±15.34	0.002†
3.week	39.00±21.06	48.34±21.67	
	*P=0.051	*P=0.003	0.299*
8.week	38.19±17.49	55.75±20.59	
	*P=0.012	*P=0.349	

ANOVA repeated measures analysis with covariate anaysis*, mann-whitney test

The concurrence of chronic pain and psychiatric diagnosis has been reported as 16.9% in an epidemiologic study in England (Benjamin et al., 2000). The interaction of pain intensity, duration, and disability with depression, anxiety and psychological stress has been reported in various studies (Bigos et al., 2001). Brain et al. (2003) reported that the prevalence of pain in depressed cohorts and depression in pain cohorts are higher than when these conditions are individually examined. Depression in patients with pain is associated with more complaint of pain and greater impairment (Bair et al., 2003).

It was also stated in the available literature that a clear link exists between psychological variables (stress, distress, or anxiety as well as mood and emotions, cognitive functioning, and pain behavior) and neck and back pain (Bair et al., 2003; Bener et al., 2013). Chronic LBP has been shownto be strongly related with psychosocial factors and depression is seen in 30-40% of patients (Turhanoglu, 2011). Demyttenaere et al. (2007) suggested that mental disorders (anxiety disorders and major depression and dysthymia) were more common among persons with back/neck pain than among persons without. Michalski et al. (2006) have reported that in patients with chronic LBP anxiety and depression are related with age and women tend to have more anxiety than men and depression is more common than anxiety. It is believed that the restriction of daily activities along with continuous perception of pain produces a tendency to depression in patients with LBP (Linton, 2000).

The influence of psychological factors also seems to be important in the transition from acute to chronic low back pain (Linton, 2000). It was known that depression and pain share biological pathways and neurotransmitters, which has implications for the treatment of both concurrently (Bair et al., 2003).

Loss of physical capacities, or deconditioning, occurs as a consequence of persistent activity restrictions. These physical impairments result in disability, or decreased ability to engage in activities of daily living (Cohen, 2002). It has been found that certain symptoms of depression (especially, feeling that everything requires an effort, low energy) were more common among patients with co-occurring pain than in depressed patients without pain (Korff et al., 1996). In another study conducted by Snekkevik et al. (2014) usculoskeletal pain and depression have been found to be independently associated with substantial fatigue. Deconditioning as a result of both pain and depression results in disability. Work absenteeism has been shown to be twice more frequent in patients with pain and depression than those with only depression (Demyttenaere et al., 2006). According to Häuser et al (2014); age, widespread pain, and depression are independent predictors of disability as shown in their study comparing patients with disabling and nondisabling chronic LBP. Multivariate analyses have shown that the unique predictors of disability for LBP patients were pain and depression (Bean et al., 2014).

The evidence from randomised controlled trials has demonstrated that exercise therapy is effective in reducing pain and improving function in the treatment of chronic LBP (Middelkoop et al., 2010). It is also suggested thatactivity and active involvement in treatment are particularly important with chronic pain patients who are depressed (Dworkin et al., 1986).

Our results are in concordance with the evidence in previous studies. We prescribed dynamic lumbar core exercises and physical therapy modalities to both groups. Improvement within groups was achieved in pain, disability and physical role of both groups at the 3rd week, but only group 1 had significant improvement in these parameters and also emotional role at the 8th week.

Durmus et al. (2014) have reported that exercise therapy resulted in significant improvement in pain, disability, muscle strength, endurance, SF-36, and depression in patients with chronic low back pain. In a study comparing 3 different treatment regimens in chronic LBP patients, the first group was instructed in home exercise program, the second was given TENS, local heat and therapeutic ultrasound besides a home exercise program and the last group did aerobic exercises with a treadmill three days a week and also received a home exercise program. Reduction of pain was achieved in all group sat short term but improvement in the emotional state and functioning was seen only in the group that was treated with physical therapy modalities and home exercise program (Koldas et al., 2008).However, improvement in pain intensity and subparameters of SF-36 such as pain, emotional role functioning and mental health were better at the 8th week follow up in patients without depressive affect. We have demonstrated that besides impairment of quality of life, poor response to treatment was also observed in chronic LBP patients with depressive affect. Influence of having depressive state was especially on the improvement of pain and emotional state of the patients.

Disability and physical capacity of the patients after physical therapy were not found to be effected from the depressive state of the patients.

There have been few systematic comparisons of chronic pain patients with and without depression regarding their response to treatment. In contrast to our findings, one of them reported (Dworkin et al., 1986) that depressed and non-depressed chronic pain patients were found to be quite similar with respect to demographic, pain-related, and treatment response variables. Another single blind prospective cohort study based on patients with chronic low back pain who completed a 4-week multimodal rehabilitation program showed that depressive symptoms demonstrated no predictive value for pain reduction (Michaelson et al., 2004).

However, Melloh M et al (2014) suggested that better mental health (subscale of SF-36) predicted improved outcome in an individually designed exercise therapy program for chronic LBP. Also, adherence to the exercise program almost doubled the probability of a favorable outcome. It was also shown (Melloh et al., 2013) that depression was associated with LBP especially after 6 weeks and course of recovery was slower in depressive patients with acute back pain.

According to Schmerz et al. (2013) multiple target approach to reduce pain, pain-related fear and avoidance behavior and also depressive symptoms should be considered in the treatment of chronic LBP. Self-efficacy and fear avoidance beliefs in chronic LBP patients seemed to be associated with depression, disability, and fatigue (Moraes Vieira et al., 2014). Turner et al. (2007) have identified the prognostic factors of LBP outcome as a higher level of depressive symptoms, nonspecific physical problems, rumination, catastrophizing, and stress at baseline.

Conclusion

Our study has shown that patients with chronic LBP and a depressive emotional state are inclined to have more disability and poorer quality of life, while physical therapy and exercises yield to less improvement in pain and some items of quality of life in SF-36 in these patients than those without depressive affect. Evaluation of emotional state in patients with chronic low back pain before initiation of physical therapy seems to be useful in the prediction of efficacy of treatment.

Though association of chronic pain and depression has been a known fact, the influence of depressive effect on treatment outcome is still an open field for investigation. Our study demonstrates the need for new studies concerning the relationship of response to treatment with depressive emotional state.

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RESEARCH ARTICLE

Colposcopic Evaluation of Pre and Postmenopausal Women with Abnormal Cervical Cytologies

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Abstract

Objective: We aimed to evaluate the efficacy of conventional cytology on detecting precancerous lesions in postmenopausal women by comparing the results of colposcopic biopsies of the pre and postmenopausal women with abnormal cervical cytologies.

Methods: Between January 2010-December 2014 we reviewed patients who underwent colposcopic examination in clinic of obstetrics and gynecology of Bakirkoy Dr Sadi Konuk Teaching and Research Hospital retrospectively. The women were evaluated according to menopausal status, abnormal cervical cytologies and colposcopic examination results. NCSS (Number Cruncher Statistical System) for statistical analysis was used.

Results: Patient population (n=1658) was composed of 1289 premenopausal (77.7%) and 369 postmenopausal (22.3%) women. According to the results of cervical cytologies; benign Atypical squamous cells-unknown significance (ASCUS), Atypical squamous cells where a high-grade lesion cannot be eliminated (ASC-H) were not found statistically significant between two groups ($p>0.05$). Low-grade squamous intraepithelial lesion (LSIL); in premenopausal group, and high-grade squamous intraepithelial lesion (HSIL) in the postmenopausal group were found significantly higher (respectively $p=0.006$; $p=0.002$; $p<0.01$). When colposcopic results were evaluated; benign findings in postmenopausal women and cervical intraepithelial neoplasia (CIN) I in premenopausal women were found significantly higher (respectively, $p=0.001$; $p=0.001$; $p<0.05$). When postmenopausal patients with ASCUS cytology were evaluated, benign biopsy rate was significantly higher in colposcopy, on the other hand, CIN I ratio was significantly higher in premenopausal group with ASCUS cytology ($p=0.007$, $p<0.01$). When patients with LSIL were evaluated, benign biopsy rate in colposcopy was higher in postmenopausal patients, CIN I and CIN II-C III- Squamose cell carsinoma (SCC) rates were found in highly significant in premenopausal patients ($p= 0.032$; $p<0.05$).

Conclusion: When compared with the premenopausal patients group, we have reached the conclusion that the conventional cytology has less efficiency in detecting the precancerous lesions in postmenopausal cases; therefore, colposcopic examination may be appropriate in postmenopausal women. Routine liquid based cytology and HPV screening can achieve clarity in this debate, screening programs should be implemented effectively especially in postmenopausal group and further large scale studies are needed.

Key words: Cervical cytology, Menopause, Colposcopy, Precancerous cervical lesions

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Introduction

Cervical cancer is the second most common cancer in women all over the world. Approximately 500 thousand new cases are diagnosed every year; 83% of them are seen in developing countries. When compared with the previous years, thanks to effective screening programs for the cervical cytology especially in developed countries, the incidence has decreased significantly with early diagnosis and treatment, but it has been continuing

to be an important cause of morbidity and mortality among women (Parkin et al., 2005, Sankaranarayanan et al., 2005). Although the possible sampling errors and pathological evaluation; the conventional cytology is still the most commonly used method of cervical cancer screening, as it is cheap, easy and easily acceptable by the patients. One of the best ways to demonstrate the effectiveness of the screening is to evaluate the correlation between cervical biopsy and cervical cytology (Rohr et al., 1990). In addition, while it has been reported that the postmenopausal women with abnormal cervical cytology can be monitored in the same way with the general population, the biopsy directed by colposcopy is considered as gold standard in the evaluation of cervical lesions (Massad et al., 2013). The studies on this subject are usually focused on the young patients but the studies for the group of postmenopausal women are few and inadequate (Teaff et al., 1990; Ferenczy et al., 1997, Flynn et al., 2001; Elter et al., 2004). On the other hand, it has been suggested that the abnormal cervical cytology may be inadequate for predicting the precancerous lesions in the postmenopausal women (ASCUS-LSIL Triage Study Group, 2003, Wright et al., 2006). There is no consensus on screening programs which will be held for the detection and management of cervical precancerous lesions in postmenopausal women. In the light of these information; we aimed to evaluate the effectiveness of the conventional cytology on detecting precancerous lesions for the postmenopausal patients by comparing the colposcopic examination and biopsy results with the smear results of the pre-and postmenopausal women with abnormal cervical cytology.

Material and Methods

Between January 2010-December 2014 a total of 1658 patients taken into colposcopic examination were evaluated retrospectively after receiving of the ethical approval in our hospital which is a tertiary center. The 1289 (77.7%) of the women included in the study were pre-menopausal and 369 (22.3%) of them were post-menopausal. The age, parity, genital warts and smoking history were recorded by examining the digital information in the colposcopy unit. People who use oral contraceptives or hormone replacement therapy, people who have CIN, atypical glandular cells (AGC) and cervical cancer story and also the patients who have endocervical Curettage due to inadequate colposcopy were excluded from the study. The conventional cervical smears were taken with aMedbar® smear brush (Medbar Medical Equipments Tourism Industry Trading Limited Company in Izmir, Turkey) and spread on lama and then sent to the pathology laboratory of our hospital after being fixed with alcohol. The preparations stained with the Papanicolaou method were evaluated according to Bethesda system histologically. The patients with postcoital bleeding, patients who are clinically suspicious of the lesions or cervical erosion in the vaginal examination and also all of the patients directed to the colposcopy examination as they were detected with ASCUS, ASC-H, LSIL, HSIL were included in the study. In the colposcopic examination, the cervix was scanned by small magnification after being washed with saline solution, and then we waited for 60 seconds after the application of 3-5% acetic acid. The aceto-white areas were scanned by small and large magnifiers and abnormal vascularisations were evaluated with green filter. All of the squamo-columnar junction observed cases were evaluated as satisfactory; unobserved ones were evaluated as unsatisfactory colposcopy. The presence of iodine-repellent area scanned by the application of iodine solution. The biopsies were taken from the suspicious lesions, the regions where abnormal vascularisation, punctuation and mosaicism seen, aseto-white andlugol negative areas. All biopsy specimens were sent to the pathology laboratory for the histopathological examination by being identified in formaldehyde. The results were evaluated in three groups such as the cases which cannot be biopsied or the cases which were evaluated as benign as a result of the biopsy (cervicitis and regenerative changes associated with inflammation, atrophy, cervical polyp, metaplasia), CIN I/mild dysplasia detected cases; CIN II/ moderate dysplasia- CIN III / severe dysplasia – squamous cell carcinoma (SCC) detected cases NCSS (Number Cruncher Statistical System) 2007 (Kaysville, Utah, USA) program was used for statistical analysis. In the assessment of research data The Pearson's chi-square test and Fisher Freeman Halton test were used for the comparison of quantitative data in addition to the descriptive statistical methods (Mean, standard deviation, median, frequency and percentage). The results were evaluated at 95% confidence interval, at the

p<0.05 level of significance.

Results

1658 colposcopy performed cases whose demographic characteristics were presented in Table I were evaluated according to menopausal status.1289 women in the study were pre-menopausal (77.7%) and 369 (22.3%) were post-menopausal. While the parity was statistically significantly higher in postmenopausal patients, any differences between two groups have been detected in terms of genital warts, smoking, cervical lesions, postcoital bleeding and a history of abnormal cervical cytology.

Table1: The Demographic Characteristics of Cases who Underwent Colposcopic Evaluation

	Premenopause (n=1289, 77.7 %)	Postmenopause (n= 369, 22.3 %)	Total (n=1658)	[a]p-value
Age (average±SD) [b]	36.3±6.7	53.1 ± 7.1	40.21±9.68	0.0001**
Parity[b]	2 (0-5)	3 (0-7) *	2 (0-7)	0.0001**
Genital warts (%)[b]	20 (1.6)	3 (0.8)	23 (1.4)	0.285
Smoking (%) [b]	121 (9.4)	32 (8.7)	153 (9.2)	0.676
Postcoital bleeding (%)[b]	113 (8.8)	32 (8.7)	145 (8.7)	0.955
Cervical lesions (%)[b]	351 (27.3)	118 (32)	469 (28.3)	0.174
Abnormal cervical cytology (%)[a]	805 (62.5)	216 (58.5)	1021 (61.6)	a0.173

[a]Pearson Chi-square test [b]Fisher exact test *p<0.05 **p<0.01

Table 2: Cytologic and Colposcopic Evaluation Results

		Premenopause (n=1289, 77.7 %)	Postmenopause (n= 369, 22.3 %)	Total (n=1658)	p-value
Cytologic evaluation	**Benign**	432 (33.5)	129 (35)	562 (33.9)	0.493
	ASCUS	582 (45.2)	155 (42)	737 (44.5)	0.284
	ASC-H	30 (2.3)	14 (3.8)	44 (2.7)	0.122
	LSIL	207 (16.1)*	38 (10.3)	245 (14.8)	0.006**
	HSIL	44 (3.5)	26 (7.1)*	70 (4.2)	0.002**
Colposcopic evaluation	**Benign-no biopsy**	845 (65.6)	276 (74.8)*	1121 (67.6)	0.001**
	CIN I	334 (25.9)*	60 (16.3)	394 (23.8)	0.001**
	CIN II-III-SCC	110 (8.5)	33 (8.9)	143 (8.6)	0.805

[a]Pearson Ki-kare test [b]Fisher exact test *p<0.05 **p<0.01

ASCUS ; Atypical squamous cells - unknown significance, ASC-H;Atypical squamous cells where a high-grade lesion cannot be eliminated,LSIL; Low-grade squamous intraepithelial lesion, HSIL; High-grade squamous intraepithelial lesion, CIN;Cervical intraepithelial neoplasia. SCC; Squamose cell carsinoma

Tablo 3: The Relationship Between Cervical Cytology and Colposcopy Findings

	Colposcopy	Cervical cytology				
		Benign	**ASCUS**	**ASC-H**	**LSIL**	**HSIL**
Premenopause	**Benign, nobiopsy**	354(83,1)	373 (64,1)	10 (33,3)	101 (48,8)	7 (16,7)
	CIN I	62 (14,6)	169 (29) *	9 (30)	85 (41,1) *	9 (21,4)
	CIN II&III&SCC	10 (2,3)	40 (6,9)	11 (36,7)	21 (10,1)*	26 (61,9)
	Total	426 (100)	582 (100)	30 (100)	207 (100)	42 (100)
Postmenopause	**Benign, nobiopsy**	113(87,6)	120 (77,4)*	5 (35,7)	27 (71,1) *	5 (20)
	CIN I	14 (10,9)	28 (18,1)	1 (7,1)	10 (26,3)	6 (24)
	CIN II&III&SCC	2 (1,6)	7 (4,5)	8 (57,1)	1 (2,6)	14 (56)
	Total	129 (100)	155 (100)	14 (100)	38 (100)	25 (100)
	p-value	[a]0.468	[a]0.007**	[b]0.223	[a]0.032*	[b]0.889

[a]Pearson Ki-kare test [b]Fisher Freeman Halton test *p<0.05 **p<0.01

Smear and colposcopy results were presented in Table II. According to the smear results; while any statistically significant differences were found between the groups (p>0.05) in terms of benign, ASCUS, ASC-H distributions, in premenopausal group the LSIL, in the postmenopausal group the HSIL were found to be statistically significantly higher (respectively, p=0.006; p=0.002; p<0.01).
When colposcopy results were evaluated; benign findings in postmenopausal women; CIN I in the premenopausal group were determined to be statistically significantly higher (respectivelyp=0.001; p=0.001; p<0.05).
In terms of the group consisting of CIN II, CIN III and SCC no significant difference was detected according to the menopausal status (p=0.805, p>0.05).

The relationship between smear results and colposcopy findings have been presented in Table III. According to menopausal status, there was no statistically significant difference between the distribution of colposcopy results of the cases whose smears have bening, ASC-H and HSIL (respectively, p=0.468, p=0.223, p= 0.889 p>0,05). When colposcopy results were evaluated according to menopausal status, statistically significant differences were found in the cases who have ASCUS and LSIL in smear. When the significance was analyzed in terms of ASCUS, CIN I ratio in premenopausal group was significantly higher as benign biopsy rate was high in the colposcopies of postmenopausal patients (p=0.007; p<0.01).When the significance was analyzed in terms of LSIL, while the normal biopsy rate was high in colposcopy of postmenopausal patients, CIN I and CIN II-CIN III-SCC colposcopy finding rates of the patients without menopause were found to be significantly high (p=0.032; p<0.05). While the ASCUS / LSIL ratio was 4:07 in postmenopausal women, we have found it as 2.8 in premenopausal group.

Discussion

At the ASCCP (American Society for Colposcopy and Cervical Pathology) consensus presented in 2012, it has been reported that the postmenopausal women with abnormal cervical cytology can be followed in the same way with the general population and after 65 years old there is no need to scan for the women who have no history of abnormal cervical cytology and previously regular screening (Massad et al., 2013). Compared to the young women, effective cervical cancer screening programs have not been implemented for postmenopausal women depending on genital atrophy, therefore it has limited the diagnostic methods such as colposcopy and smear, because of these reasons the risk of invasive cervical cancer have been continued to increase with age (Sellors et al., 2002, National Cancer Institute Workshop, 1993). The hormonal changes developing in the postmenopausal period, especially hypoestrogenism situation causes atrophies of the genital organs, and atypical findings in cervical cytology. Again the possibilities of inadequate colposcopic examination have been increased as the transformation zone can't be evaluated due to the genital atrophy (Dresang LT, 2005). Therefore, we have not included the cases with inadequate colposcopy findings in our study. Furthermore, the benign degenerative changes in the immature squamous cells connected to the hypoestrogenism, obvious atrophy can imitate squamous intraepithelial lesions and even invasive cancer in postmenopausal women (Saad et al., 2006). Unlike young women, the growth in squamous cell nucleus is a histological finding often seen inpostmenopausal women. Especially the growth of squamous cell nucleus has been increased the diagnosis of ASCUS in postmenopausal cases and compared to young patients ASCUS/LSIL rate has been increasing (Selvaggi et al., 2002; Massadet al., 2003; Saad et al., 2006). While the ASCUS/LSIL ratio of postmenopausal patientswas 4.07, we have found it as 2.8 for the premenapausal group. Even if the relieving of the genital atrophy with estrogen therapy in postmenopausal women is considered as a suitable method, this subject is also controversial. As there are studies suggesting that local estrogen therapy can distinguish thereal preneoplastic changes with benign cytologies imitating atrophy by decreasing vaginal atrophy (Piccoli et al., 2008), there are also studies suggesting that the hormone replacement therapy (HRT) can cause the artifacts similar to the cytology findings imitating LSIL by increasing the glycogenation (Jemal et al., 2004). While local estrogen therapy was recommended for the postmenopausal women in the 2006 ASCCP consensus, this proposal was withdrawn in 2012 (Massad et al., 2013). Because of this discussion, we have excluded the cases using HRT or local estrogen from the study. In our study, the LSIL in premenopausal group; HSIL in postmenopausal group were determined significantly high.

When colposcopy results were evaluated, benign findings in postmenopausal women; CIN I in the premenopausal group were found to be significantly high. These findings were considered because of progression of which a part of the preinvasive cervical lesions showed with age or regression the majority suffered from (Melnikow et al., 1998, Bansal et al., 2008). Considering the relationship between the results of smear and colposcopy findings; while benign biopsy rate was statistically higher at colposcopy in the postmenopausal cases whose smear result was ASCUS, CIN I rate was significantly higher in premenopausal group. Similarly, when the significance examined in the cases where LSIL detected as a result of the smear, while benign biopsy rate was high at colposcopy in postmenopausal group, CIN I and CIN II-III-SCC rates were found significantly high for the non-menopausal women. There are studies suggesting that the abnormal cervical cytology predicts the precancerous cervical lesions less frequently in postmenopausal women than premenopausal women due to epithelial changes in atrophy (Kobelinet al., 1998; Sawaya et al., 2000; Keatinget al., 2001; ASCUS-LSIL Triage Study Group, 2003; Wright et al., 2006). In our study also, the abnormal cervical cytology findings including ASCUS and LSIL are inadequate for predicting the precancerous lesions in postmenopausal women in comparison with the premenopausal patients. It is known that postmenopausal women were less likely to apply for a gynecological examination because of traditional beliefs in our country. Considering the failure in application of the effective cervical cancer screening programs in postmenopausal women for these findings, it will be appropriate to direct the abnormal cervical cytology detected cases to the colposcopy. The limitations of our study are being retrospective, our lack of long-term follow-up cases, and taking of cervical cytology with the conventional method. In addition, as it was not for routine use, HPV screening could not be made. When the liquid-based techniques which have been entering into a routine use recently in our country and the data which will be obtained by HPV screening are evaluated, we can reach more reliable results.

Conclusion

When compared with premenopausal patients the conventional cytology seems to be less effective in detecting the precancerous lesions for postmenopausal cases. The benefits of hormone replacement therapy is controversial because of different operational problems. The data which will be obtained with the entry ofthe liquid-based cytology and HPV screening into the routine clinical practicewill enable us to achieve more reliable results. In addition, without any neglect, more effective implementation of screening programs especially in postmenopausal patients and further studies are needed for theclarification of this issue.

Informed Consent: Necessary information using the patient information form and consent form was taken from the patients.
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REVIEW

Alternative Methods in the Management of Menopausal Symptoms

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Abstract

The majority of women have mild or moderate symptoms during menopause, however, some women have severe complaints. Studies have been carried out which suggested that alternative methods are thought to be effective in improving menopausal symptoms. The aim of this review is to examine alternative methods used towards menopause symptoms using original research studies.

Published literatures and compurterised studies in Google Scholar, PubMed and Science Direct databases investigating effective methods at coping with menopause symptoms using the search terms "menopausal symptoms", "alternative methods", "management of symptoms" have examined in this study.

Studies have shown that acupuncture therapy can significantly reduce severity of hot flashes and it can improve sleep quality; moderate physical activity can reduce the frequency of hot flashes; the consumption of soy products can improve in vasomotor symptoms; probiotics can improve vaginal flora; an adequate intake of vitamin D and calcium during menopause may reduce the incidence of fractures.

Adapting healthy lifestyle behaviors and learning ways to reduce during the climacteric can help women adjust too many of the changes during this time. Health staffs should have inform about alternative methods and they should collect data with the use of alternative methods among women who menopausal symptoms.

Key words: Menopausal symptoms, Alternative methods, Management of symptoms.

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Introduction

Women's lives encompass six stages including infancy, childhood, puberty, sexual maturity, menopause and old age. The process of menopause, also known as the climacteric, begins around the age of 45 and continues an average of 15-20 years. These years include premenopause, perimenopause, postmenopause and senium, the final period of a woman's life span. During this time the production of female hormones declines, reproductive capacity gradually ceases, and certain symptoms and irregular menses begin to occur (Özkan, 2008; Egelioğlu, 2012).

Perimenopause includes the two to seven-year period before the onset of menopause and the one-year amenorrhea period indicating that a woman has reached full menopause. Vasomotor changes,

fatigue, headaches and emotional disturbances occur during this period. Postmenopause is defined as the period after menopause (Atasü&Şahmay, 2001).

Various factors can affect the age of menopause onset. Heredity and race are most important. A study which examined the relationship between age at menarche and age at menopause found no statistically significant meaning (Oteroa et al., 2010). The age at menopause in European societies is between 45-54 years, while the average age of menopause in the United States is 51. Studies conducted in Turkey have determined that the average age of menopause is 47 for Turkish women (Özcan&Oskay, 2013).

The majority of women have mild or moderate symptoms during menopause; however, some women have severe complaints. These changes and symptoms including vasomotor changes, emotional changes, sleep problems, changes in the urogenital system problems, muskular and skeletal problems and cardiovascular problems occur as a result of estrogen decline and they manifest as cycle disorders (Taşkın, 2012). Studies have been carried out which suggested that alternative methods are thought to be effective in improving menopausal symptoms (Al-Akoum et al., 2009; Mansikkamaki et al., 2012; Hachul et al., 2012; Taavoni et al., 2013; Newton et al., 2014).

The aim of this review is to examine alternative methods used towards menopause symptoms using original research studies.

Method

Published literatures and compurterised studies in Google scholar, PubMed and Science Direct databases investigating effective methods at coping with menopause symptoms using the search terms "menopausal symptoms", "alternative methods", "management of symptoms" have examined in this study.

Vasomotor Changes

Many menopausal women experience "hot flashes" and "night sweats" caused by changes in vasodilation and vasoconstriction.

Vasomotor changes may continue for 10 years after menopause. Hot flashes, which usually last between 30 seconds and 5 minutes, can 1-2 times or up to 50 times per day. These may disappear in six months or they may continue as long as 30 years. Seventy-five percent of women experience hot flashes during menopause. Hot flashes usually begin in the early stages of menopause. They vary in terms of frequency, duration and intensity and can spontaneously come to an end (Taşkın, 2012).

Although vasomotor symptoms are the most common and disturbing changes among the menopausal symptoms, the incidence varies among communities. Vasomotor symptoms are seen more often in European women than in those of Far East countries (Taşkın, 2012). A study in Turkey found that 65.1% of women experienced hot flashes and 41.9% were bothered by night sweats (Saka et al., 2005). Özvarış et al. (2014) determined that 67.9% of women complained of hot flashes, Chedraui et al. (2014) found that 77.6% of women have exposed hot flash, and Ertem (2010) found that 79% of women experienced hot flashes.

Studies have been carried out which suggested that certain plants are thought to be effective in easing menopausal symptoms. Carmignani et al. (2010) investigated the effect of the consumption of soy products, hormone therapy, and the placebo effect on menopausal symptoms. They determined a statistically significant improvement in vasomotor symptoms in the groups using soy products and hormone therapy. Another study found a reduction in vasomotor symptoms in women who consumed black cohosh tablets every day for 8 weeks, compared with women consuming a placebo (Mohammad-Alizadeh-Charandabi et al., 2013). A randomized controlled trial by Aghamiri et al. (2015) determined that hops (Humuluslupulus L) reduced the severity of menopausal symptoms.

Acupuncture studies have shown that this therapy can also reduce hot flashes. In a randomized controlled trial study, Nir et al. (2007) reported that when compared with acupuncture, a placebo was effective in reducing the severity of hot flashes. However, it was not effective in reducing their frequency. Another study determined that acupuncture had a statistically significant effect on the severity and frequency of hot flashes (Borud et al., 2009).

A study investigating the effect of physical activity on vasomotor symptoms reported that 50 minutes of exercise four times per week for six months caused a statistically meaningful decrease in the frequency of hot flashes (Luoto et al., 2012). Another study determined that moderate physical activity reduced the frequency of hot flashes (Elavsky, 2012).

Emotional Changes

Menopausal changes affect a woman's body and brain function, and these often lead to physical and emotional changes (Kavlak, 2011). Many women going through menopause may experience fatigue, exhaustion and a general feeling of unhappiness. They may also have outbursts of temper, crying, memory lapses and an inability to concentrate (Taşkın, 2012). Koç and Sağlam's research (2008), determined that 82% of women experienced restlessness and irritability, 80.2% were forgetful, and 69.4% felt sad and depressed in the climacteric period. Another study determined that 40.0% of women felt nervous (Erkin et al., 2014). The relationship between depressive symptoms and estrogen has not been fully determined. Although some studies have reported that the decline of estrogen leads to depression, different results have also been reported (Bezircioğlu et al., 2004). These results have indicated that menopausal and depressive symptoms were affected by various cultural and ethnic factors (Taşkın, 2012).

The Baksu et al. (2005) study determined that when compared to a placebo, tibolone and transdermal estrogen helped improve menopausal symptoms, depression and anxiety. Another study reported that leaf of Ginkgo biloba increased mental flexibility (Borelli& Ernst, 2010).

Sleep Problems

With increasing age, sleep problems become more prevalent in both genders. Some studies have indicated that perhaps the lack of estrogen affects women's REM sleep but this is controversial.

One study reported that 50% of menopausal women experienced insomnia (Saka et al., 2005). Another study determined that 35.3% of women suffered from insomnia (Erkin et al., 2014). Young et al. (2003) indicated that sleep quality wasn't worse in perimenopusal or postmenopausal women, compared with premenopausal; to the contrary, postmenopausal women had deep sleep and significantly longer total sleep time. Also, they found menopasusal status was moderately related to self-reported dissatisfaction with sleep but wasn't consistently associated with symptoms of insomnia or sleepiness (Young et al., 2003). Sleep disorders and sleep disruptions lead to irritability, anxiety, fatigue, forgetfulness, and concentration disorders in postmenopausal women (Saka et al., 2005; Kal, 2011).

In the studies noted that methods such medicinal herbs, acupuncture and exercises are used to improve sleep disorders (Taavoni et al., 2013; Al-Akoum et al., 2009; Mansikkamaki et al., 2012; Hachul et al., 2012; Newton et al., 2014). Several studies determined a significant improvement in sleep quality for women who had taken part in regular aerobic exercise for six months (Mansikkamaki et al., 2012; Newton et al., 2014). Participation in yoga exercises also resulted in a statistically significant decrease in insomnia symptoms (Mansikkamaki et al., 2012; Newton et al., 2014). In a study of sleep disorders in which 100 women participated, 50% of the women consumed a placebo capsule while the other 50% took a valerian and lemon balm capsule (Taavoni et al., 2013). Compared with the placebo, the valerian and lemon balm capsule had a definite effect on easing sleep disorders and improving women's quality of sleep (Taavoni et al., 2013). A study of Hypericumperforatum (St. John's Wort) and a placebo showed that this medicinal herb exerted a statistically significant improvement on women's sleep problems (Al-Akoum et al., 2009). In the Hachul et al. study (2012), acupuncture was applied to postmenopausal women who were not receiving any treatment. Results of the treatment showed a significant improvement in the women's quality of sleep and quality of life.

Changes in the Urogenital System

The onset of menopause also triggers many changes in a woman's urogenital system. These changes include a decrease in cervical and superficial glands' secretions, a thinning of the vaginal epithelium, and a decrease in elasticity and blood flow. The result is atrophic vaginitis. Vulvar dystrophy worsens. Genital atrophy during menopause creates dyspareunia, difficult or painful sexual intercourse, which has a negative impact on sexual function (Özkan, 2008; Taşkın, 2012).

Another change occurs with a thinning of the mucosa of the urethra and surrounding tissues. This affects the capacity of the bladder to retain urine. Consequently, women experience problems such as dysuria, urinary incontinence, and frequent urination. A study performed in our country found that two of five women experience sexual problems, vaginal dryness and urinary incontinence in the postmenopausal period (Özvarış et al., 2014). Another study found that 36.7% of women had sexual intercourse less often and 34.7% had less

interest in sexual relations (Erkin et al., 2014). Many studies have been conducted to test the effectiveness of possible remedies to relieve the effects of menopausal changes. One study determined that two weeks of daily use of probiotics improved the vaginal flora (Petricevic et al., 2008). Another study reported that the use of hops brought about a statistically significant decrease in vaginal dryness (Borelli&Ernst, 2010). The randomized controlled trial study of Larmo et al. (2014) determined that compared to the placebo, the intake of Buckthorn oil statistically significantly improved the integrity of the vaginal epithelium.

Muscular and Skeletal Problems

Bone loss begins after the age of 25-30 and accelerates after menopause due to decreasing estrogen levels. Approximately 30% of total body bone mass is lost in the first 15-20 years of the postmenopausal period. While 52-66% of this bone loss is due to loss of estrogen, the rest is due to the aging process (Kal, 2011).

Risk factors for osteoporosis in women are affected by genetic characteristics such as fair skin, short stature, and thin body frame. Other factors include lifestyle, eating habits, endocrine disease, and age at onset of menopause. The bone mineral density of darker races is higher than Caucasians. Bone degeneration caused by inactivity is a risk factor for osteoporosis. The use of tobacco and excessive alcohol consumption also contribute to its development (Taşkın, 2012). Studies have reported that the risk of osteoporosis for women in the United States over the age of 50 was 30.3%, 40.8% in Denmark, 35.4% in Japan and 24.9% in Switzerland (Kutlu et al., 2012). One study determined that 30.7% of women had joint pain (Erkin et al., 2014). Another study found that pain (88.5%) is most common menopause symptom (Chedraui et al., 2014).

Isoflavones are estrogen-like substances which are found in plants and soy beans. Some studies suggest that the use of isoflavone may prevent the loss of bone minerals (Turhan et al., 2008). Isoflavones are also believed to reduce hot flashes and the risk of breast cancer (Borelli&Ernst, 2010).

Since bone mineral density is correlated with vitamin A levels in the body, the intake of this vitamin has been found to reduce the risk of fractures (Jackson & Sheehan, 2005). Furthermore, another study has shown that an adequate intake of vitamin D and calcium during menopause may reduce the incidence of fractures. The use of vitamin K is also believed to increase bone strength (Borelli & Ernst, 2010; Papadimitropoulos et al., 2002; Richy et al., 2005).

Cardiovascular Problems

When compared to men of the same age, premenopausal women have 2.5-4.5 times less risk of developing cardiovascular disease (Kavlak, 2011). However, changes in lipid metabolism during the postmenopausal period have been reported to increase a woman's risk of cardiovascular diseases. These changes include decreases in the serum high-density lipoprotein (HDL) levels and increased levels of low-density lipoprotein (LDL) caused by cholesterol accumulation in the arteries. The increase in total cholesterol is a major risk factor for coronary heart disease (Taşkın, 2012).

As has been noted, the onset of menopause causes many changes in a woman's body and emotional status. These uncomfortable and sometimes disturbing changes have resulted in the proliferation of many alternative methods to relieve and manage the effects of menopausal symptoms. For example, studies have reported that long-term consumption of soy protein significantly decreases diastolic blood pressure and serum LDL levels, and isoflavone extract is also believed to reduce systolic blood pressure. These methods were found to have a positive impact on women's lives during the period of menopause but more evidence-based studies are needed (Borelli&Ernst, 2010).

Conclusion

In conclusion, health professionals play a very important role helping to women, adapting healthy lifestyle behaviors and learning ways to reduce during the climacteric can help to women adjust to many of the changes during this time. Furthermore, women's menopausal symptoms and quality of life may improve by using alternative treatments which have been determined to be effective with evidence-based studies. Health professionals can offer recommendations on the consumption of soy, using black cohosh tablets, using acupuncture therapy, increasing physical activity, and increasing the consumption of probiotics and prebiotics and using vitamins. All of these measures, which would include developing positive and trusting relationships between women in menopause and their medical team, will help women to navigate

this life transition with more comfort and less anxiety.

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CASE REPORT

An Interesting Piercing Injury of the Hip with a Steel Bar

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Abstract

Foreign body injuries are not uncommon. Foreign body penetration may occur in almost any part of the body. A piercing or penetrating injury of the hip or pelvis by a steel bar is a rare condition compared with the extremities. Our study aims to highlight this interesting injury and its treatment. We report the case of a 19-year-old man who was working in a construction when he fall that resulted in the piercing of the hip with a long steel bar and our treatment strategy. The patients achieved good results without neurovascular injury. Our study highlights that intervention should be done at operating room in case we confront any neurovascular injury and its complications.

Key words: Foreign body, piercing injuries,; hip, treatment strategy.

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Introduction

Foreign body injury was most frequently in the foot and the hand and most commenly seen in young ages (Nagendran, 1999; Salati and Rather, 2010). Foreign bodies may be composed of different materials such as metal, glass, wood, plastic, etc. (Hunter and Taljanovic 2003; Rubin et al., 2010). A piercing or penetrating injury of the hip or pelvis by a steel bar is a rare condition compared with the extremities. We report the case of a 19-year-old man who was working in a construction when he fall that resulted in the piercing of the hip with a long steel bar. The steel bar entered the hip from the posteromedial aspect of the left hip through adductor muscles and gluteus maximus muscle near from the sciatic nerve and away from the femoral neurovascular bundle. It was away from the pelvic cavity, bladder and rectum. Nearly 20 cm. of the bar spanned in a posterolateral direction and didn't exit the body. Luckly it wasn't damaged femoral neurovascular bundle or the sciatic nerve.

Case Report

A 19-year-old man was admitted to the emergency department of our hospital with a piercing injury to his hip. The patient had fallen from the second floor of the construction he was working and he was impaled on a steel bar at ground level. The rod-like steel bar, approximately 150 cm long and 3cm thick, penetrated his left hip from the posteromedial aspect and entered the hip through adductor and gluteus maximus muscles near to the sciatic nerve and away from the femoral neurovascular bundle (Figure 1). We report our treatment strategy at this injury.

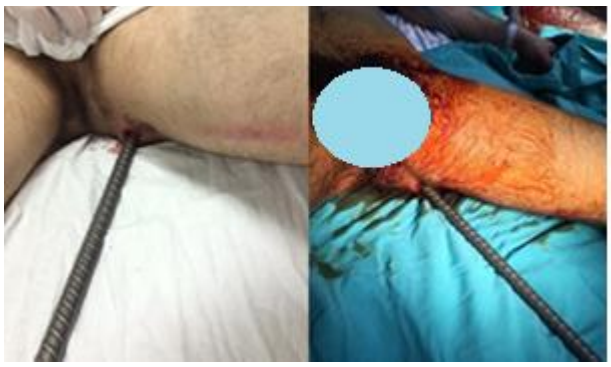

Figure 1. Patient's photographs when he came to the emergency department.

Radiological studies of the pelvis and lower limbs revealed that the steel bar spanned in a posterolateral direction nearly 20 cm and didn't exit the body (Figure 2). Luckly it wasn't damaged femoral neurovascular bundle or the sciatic nerve and there was no fracture of any side of the pelvis. In the emergency room tetanus vaccination was performed without immunization and a broad-spectrum antibiotic was prescribed.

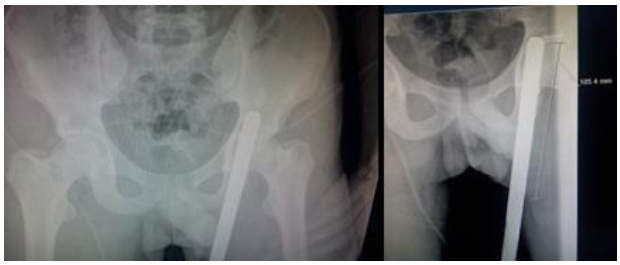

Figure 2. Radiographs of the steel bar which spanned in the posterolateral direction nearly 20 cm and didn't exit the body.

For removing the deep-seated steel bar in the operating theater we made the operation under general anesthesia so as not to injure the surrounding organs during removal (Fig. 3). We removed the bar slightly when we ensure that no pelvic cavity, bladder and rectal injury had occurred. The muscles penetrated by the steel bar were irrigated and the skin was repaired. After the operation the patient's hip movements were full at any direction. After 10 days rest he was able to work.

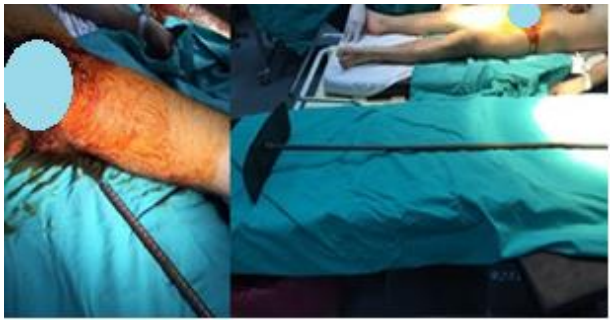

Figure 3. Postoperative photographs of the patient and the steel bar.

Discussion

Foreign bodies may be composed of different materials. Piercing or penetrating injuries of the pelvis and hip joint are rare but can lead to catastrophic neurovascular or internal organ injuries (Franko et al., 1993). The iliac vessel, sacral plexus, sciatic nerve, female genital organs and femoral and popliteal neurovascular bundles are likely to be affected at the time of injury or during removal of the foreign body (Wang et al., 2009). We find only one case about a long steel bar penetrating the pelvis and bending toward the extremities in the literature (Lee et al., 2012). No other reports of patients without neurovascular deficit after sustaining this type of injury of extremities have been published. Our case was not complicated with neurovascular deficits or fracture of the pelvis. The treatment we advocated was in keeping with the guidelines used for any retained foreign body remove foreign body, irrigate its tract, provide systemic antibiotic (Grobbelaar and Knottenbelt, 1991). After the foreign body is removed, debridement and copious irrigation should be performed to remove any residual foreign matter. In this case to avoid unnecessary morbidity, deep dissection into the bar tract was not attempted. Timely removal of the steel bar with scopy and prompt introduction of intravenous antibiotics also

guided our decision not to perform a deeper dissection. If we confronted with more complicated type of this injury, a team comprising a general surgeon, a gynecologic surgeon, and an orthopedic surgeon should be assembled to remove the object and treat any potential complications (Bergeron et al., 2015). It also should be noted that hip joint arthrotomy or expanded exposure for removal of the bar from the hip joint can result in surgical morbidity (Lee et al., 2012). Therefore, we attempted to remove the bar slightly from the hip in case of any neurovascular complication.

Conclusion

Our study highlights that intervention should be done at operating room in case we confront any neurovascular injury and its complications.

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CASE REPORT

Burkitt's Lymphoma Presenting as Maxillary Swelling: Case Report

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Abstract
In the head and neck region, lymphomas are the most frequently seen malignant lesions after squamous cell carcinoma. Burkitt's lymphoma is a malignant, highly aggressive non-Hodgkin's lymphoma. It is a B-cell type that generally presents in the oral region as a rapidly growing mass, which is usually misdiagnosed as odontogenic infection. In this case report, we present the diagnosis of Burkitt's lymphoma in a 3-year-old boy patient who was admitted with odontogenic abscess and facial swelling complaint.

Key words: Burkitt's lymphoma, odontogenic abscess, chemotherapy.

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Introduction

Burkitt's lymphoma (BL) is a rare monoclonal proliferation of B-lymphocytes and is classified as a poorly differentiated lymphocytic lymphoma (Ziegler, 1977). The tumor was first described in 1958 as a malignancy that occurs among African children (Burkitt, 1958). This tumor, which predominantly affects children, seems to be the fastest growing tumor in humans with exuberant proliferation (Ziegler, 1977). BL in three main variants: endemic, sporadic and immunodeficiency-associated types. The endemic form frequently involves the jaw bones and the abdomen of equatorial African children, whereas the sporadic form usually presents as an abdominal mass in adult patients from North America and Europe. The immunodeficiency-associated variant has a similar clinical presentation as that of sporadic subtype, with rare orofacial involvement (Bieging et al., 2010).

The clinical presentation of BL in the maxillofacial area is variable. It is characterized by

the rapid progression of symptoms with frequent multifocal extranodular involvement, including central nervous system involvement.
Within the oral cavity, this tumor can progress rapidly and appears as facial swelling or an exophytic mass involving the jaws (Kikuchi et al., 2012). In this case, we report the diagnosis and treatment of Burkitt's lymphoma presenting as facial swelling revealed by intraoral and extraoral swelling.

Case Report

A three-year-old boy presented with facial swelling and pain. Upon clinical examination, a slightly tender, sessile, firm, non-fluctuant mass 2 cm in diameter was found in the buccal sulcus in the right maxilla. The upper right deciduous first and second molars were not carious but were slightly mobile. No periodontal pockets were found. Upon extraoral examination, swelling similar to maxillary abscess was seen (Fig. 1-A). No organomegalia and lymphadenopathy were found. Moreover, no associated systemic symptoms were observed. No tumor masses or lymph nodes were clinically apparent in the head and neck region.

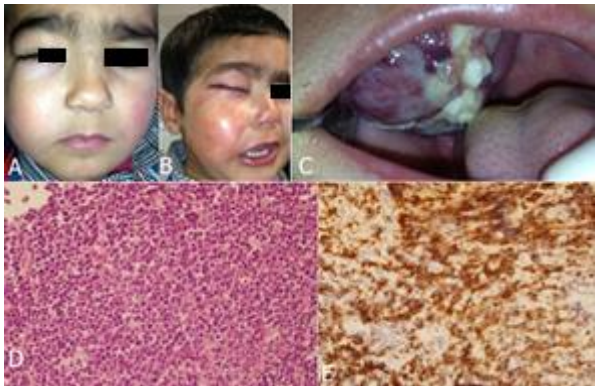

Figure 1. *A*: An extraoral appearance on day of admission. *B:* An extraoral appearance at one week following the biopsy. *C:* An intraoral appearance at one week following the biopsy. Oral examination showed gingival erythema, ulceration, suppuration and swelling extending buccally. *D:* Upon histologic examination, monotonous cells with round to oval nuclei, multiple nucleoli, and dark blue vacuolated cytoplasm with numerous mitotic figures were identified. Tingible body macrophages made a starry-sky pattern (X400, H&E). *E:* Immunohistochemically cells were positive for CD20 and negative for CD34 and Tdt. Ki67 was positive in almost 100% of the cells (X400, Ki67).

The consent form was obtained from the patient's parents and, incisional biopsy of the lesion was made under local anesthesia. Seven days after his first presentation, the patient was taken to the hospital again because of the rapid deterioration of his condition (Figs. 1 B-C). Pathological and immunohistochemical findings were consistent with BL (Figs. 1 D-E).

To evaluate the stage of BL, computerized tomoghraphies (CT) were taken. CT of the thorax was normal, but CT of the abdomen revealed ileoilial invagination, which is a sign of abdominal involvement. The right maxillary sinus was completely invaded. As the anterior, lateral, and superior walls were destroyed, the lesion extended to the subcutaneous region, right nasal cavity, and right orbital cavity. The right orbita was displaced superiorly and anteriorly by the compression of the lesion (Fig. 2 A, B). The tumor did not invade the brain, and the rest of the paranasal sinuses were normal.

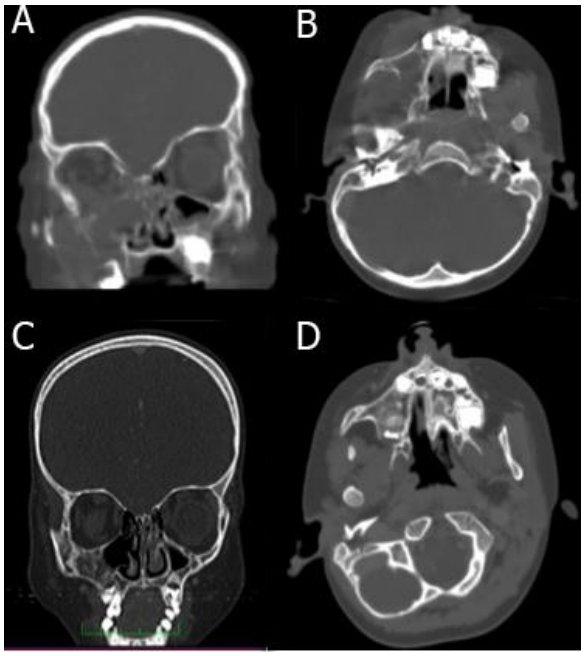

Figure 2: *A:* Coronal section shows maxillary sinus, nasal and orbital involvement. *B:* Axial section. *C and D*: Computed tomography axial and coronal image showing disappearance of previously observed lesions six months after chemotherapy.

Chemotherapy was started immediately and the remission of the lesions was corrected by CT images (Fig. 2 C, D). A remarkable resolution of

the intraoral disease, represented by stabilized teeth and resolved alveolar mucosa swelling, was observed within three weeks after chemotherapy (Fig. 3-A, B) and a 12-month follow-up (Fig. 3-C, D). The patient is being followed up closely.

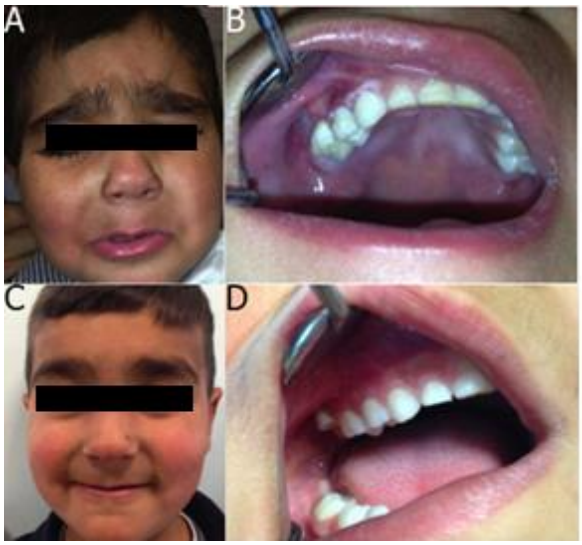

Figure 3. *A and B:* Post treatment photos showing resolution of facial and intraoral swelling after 3 weeks of chemotheraphy. *C and D*: After 12-month follow-up

Discussion

Lymphomas are malignant neoplasms of the cells of lymphoid tissues and it has two subgroups: Hodgkin's lymphoma and Non-Hodgkin lenfoma (NHL) (Molyneux et al., 2012). In the middle of the 20th century, Dr. Denis Burkitt described a malignancy that he had often seen in young African children. This lesion predominantly affected the jaws and the abdomen (Burkitt, 1958). Later, Michael Anthony Epstein, Yvonne Barr, and Bert Achong showed a herpes virus in a biopsy specimen taken from BL. This virus is known as the Epstein–Barr Virus (EBV), which is considered a potential etiologic agent (Epstein et al., 1964).

BL is a high-grade B-cell type NHL. It has three subtypes: endemic, sporadic, and immunodeficiency-related type. The endemic form of the disease is mostly seen among African children, who are nine years old on average, and is strongly linked to the EBV. It mainly affects the jaw (60%–80%) and other facial bones; it is less commonly seen in the abdomen and in the bone marrow (Banthia et al., 2003). Sporadic cases have emerged outside Africa. The mean age of presentation of the sporadic form is higher than that of the endemic form, i.e., 11–15 years of age (Kikuchi et al., 2012). Despite having the same histological features as the endemic form, the sporadic form is rarely associated with EBV infection, usually involves the abdomen (60% – 80%), and is rarely seen in the head and neck region (Banthia et al., 2003, Mbulaiteye et al., 2009). The immunodeficiency-related type is mainly seen in AIDS patients, and less than 40% of cases are associated with the EBV (Molyneux et al., 2012). In our case, the EBV titers were negative, which is a sign of the sporadic form of the disease. However, the jaw involvement and relatively younger age of the patient (three years old) are far from the common characteristics of the sporadic form.

BL is the fastest growing human tumor; the cells of the BL cycle have a 24 h–48 h period. Histopathologic examination of a biopsy specimen reveals monomorphic medium-sized cells with a high doubling rate. Macrophages have a "starry-sky" appearance as they contain apoptotic tumor cells. Gingival swelling or rapidly growing tumor masses in the oral cavity are regarded as the most common initial symptom. Therefore, making a diagnosis based only on clinical examinations is difficult. BL has no specific clinical symptoms, and it is often misdiagnosed as odontogenic infections (Balasubramaniam et al., 2009; Sasaki et al., 2011). Clinical symptoms may vary depending on the affected site. In the head and neck region, BL may cause facial asymmetry within a short time, and it can present with similar features of odontogenic infections. Nasal obstruction, rhinorrhea, facial swelling, unilateral tonsillar enlargement, cervical lympadenopathy, numb chin syndrome, loosening of teeth, ulceration, and rapidly growing mass with or without pain can also be noted (Balasubramaniam et al., 2009; Nikgoo et al., 2009; Sasaki et al., 2011). In these circumstances, patients tend to visit oral and maxillofacial surgery clinics. Therefore, clinicians should further investigate suspicious cases for possible malignancies. Intensive chemotherapy is the preferred treatment modality for BL. The rapid doubling rate of the cells makes them sensitive to cytotoxic agents, and except in the advanced stages of BL, the outcome of combination chemotherapy is excellent in children, with a cure rate of approximately 90% (Banthia et al., 2003,

Molyneux et al., 2012). Despite the fact that the patient lives outside Africa, where the prevalence of the endemic form of the disease is high, some characteristics, such as younger age and the jaw involvement, are compatible with the endemic form. However, the patient was EBV negative, which is a sign of the sporadic form.

Conclusion

Clinicians should be concerned when faced with a child patient who presents with unexplained hypermobility of teeth and swelling that is not associated with caries and apical periodontitis. In such cases, a biopsy and a radiological image should be taken immediately. The cause of the swelling must be determined, such as in our case. Orofacial swelling should be examined carefully in terms of differential diagnosis.

Informed Consent: Necessary information using the patient information form and consent form was taken.
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