VISION AND HEALTH RELATED QUALITY OF LIFE IN PATIENTS WITH BEHCET'S DISEASE

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ABSTRACT:

Background: Behçet disease (BD) is a rare, chronic, life-long disorder and a type of vasculitis that involves inflammation of blood vessels throughout the body and characterized by a triple-symptom complex of recurrent oral aphthous ulcers, genital ulcers, and uveitis**.** The prognosis of disease is severe due to the ocular, neurological and arterial involvement. Quality of life (QoL) and life satisfaction (LS) are important factors in Behcet's disease (BD). Quality of life (QoL) and life satisfaction (LS) are important outcome factors in chronic inflammatory conditions such as Behcet's disease (BD)**.** General health is more affected than visual functioning in patient with Behcet uveitis. Socio demographic and clinical variables had a significant effect on vision- and health-related quality of life. In this study we aim to evaluate the effect of ocular affection on prognosis and on general health of Behcet's patients.

Subjects and Methods: This study is conducted to 50 Behcet's patients (31 male and 19 female), 39 of them have ocular affection while 11patints have no ocular involvement. All patients were subjected to The short form 36 Health Survey (SF-36), Visual Function Questionnaire 25 (VFQ-25), disease severity and activity scores to measure the status of the disease.

Results: The statistical analysis proved a significant positive correlation between SF-36 score and VFQ25 score and a significant positive correlation between VFQ25 score and visual acuity in both good and worse eye. However there is a significant negative correlation between SF-36 score and both severity and activity of the disease.

Conclusion: Clinical outcome in BD, both activity and severity of the disease have their impaction on general health of the patients. Quality of life in Behcet patients was more affected in the patients with ocular involvement than non-ocular involvement patients.

KEY WORDS:

Behcet Disease SF-36
VFQ25 Quality of life.

INTRODUCTION:

Behçet's disease (BD) is a systemic inflammatory disorder with a diverse Spectrum of clinical manifestations including mucocutaneous, ocular, vascular, gastro-intestinal, musculoskeletal, and central nervous system involvement[1].

Behçet's disease (BS) is more prevalent in the regions along the ancient trading route known as Silk Road, extending from Mediterranean countries such as Turkey and Iran to the Far East including Korea and Japan where the prevalence of HLA-B5(51) is relatively high, compared to the rest of the globe[2].

Ocular involvement is one of the principal manifestations of Behçet's syndrome and its main cause

of morbidity. It has specific features that make it rather unique among the various forms of uveitis. Frequency of ocular involvement is around 50% among BS patients in general. It goes up as high as 70% among males and the young and as low as 30% or less among the old and the females [30].

Ocular inflammation in patients with BS is most commonly a panuveitis and retinitis. Some patients do indeed present as isolated anterior uveitis in form of iritis or iridocyclitis with hypopyon which progresses to panuevitis with time[4].

Behçet's disease was the most frequent diagnosis (32%) among uveitis patients who presented to ophthalmology clinics .Unilaterally, but in most patients the other eye also gets diseased in time. The eye disease is bilateral in around three-fourth to four-fifth of the patients[5].

The mortality rate was significantly higher in males compared to females. Standardized mortality ratios (SMR's) were specifically increased among young males. The mortality rate was highest during the first years of disease onset and had a tendency to decrease with time[6]. Eye involvement is the most serious manifestation and affects about 50% of the patients. It develops in the first few years of the disease onset and runs its most severe course during these years[7].

General health is more affected than visual functioning in patient with Behcet uveitis. Socio-demographic and clinical variables had a significant effect on vision- and health-related quality of life. Multivariate analysis of the VFQ-25 and SF-36 subscales revealed that each subscale item score is affected by additional factor(s) other than those analyzed by[8] Central retinal vein occlusion is associated with a decreased vision-related quality of life as measured by the VFQ25. A decrease in VFQ-25 scores is related to the degree of visual loss in the better-seeing eye and the overall systemic health of the patient[9].

Oral ulceration has been found to occur in 98% of patients with BD. The lesions are painful[10]. Genital ulceration is the same pattern as oral ulceration with respect to pain, initial tender nodule formation, recurrence and scarring. Scarring of scrotal lesions is considered specific for BD[11].

The skin lesions described in the early case reports, including by Behçet himself, were erythema nodosum and acneiform lesions[12].

The pathergy test is hyper-sensitivity reaction to a sterile needle prick producing an erythematous papule, pustule or ulcer after 48 hours[13].

Arthralgia and inflammatory synovitis have become accepted features of BS the latter occurring in approximately 45% of patients. the knees are the most commonly affected joints followed by the ankles, wrists, elbows, small joints of the hands and wrists, shoulders, feet and hips[14].

Neurological manifestations included spinal cord lesions, focal brain lesions, headaches and throm-bosis and occlusion of dural sinuses, all on the basis of the underlying vasculitis[15].

Ulcerative lesions of the gastrointestinal system have been described affecting the entire length of the gut. Abdominal symptoms are less specific ranging from distension to

diarrhea and pain with reports of stenosis small and large intestinal perforation[16].

PATIENTS AND METHODS:

Patients:

The study included (50) patients, (31(62%)) males and (19(38%)) females, suffering from Behçet's disease (BD). They were recruited from ophthalmology and Rheumatology and Rehabilitation departments, Beni -Sweif University hospital.

Our patients share the same races and economic status and their age ranged from 14 to 41 years and onset of disease ranged from 13 to 29 years and disease duration ranged from 3 months to 7 years in study group.

Patients were further subdivided into ocular and non ocular BD patients according to the presence of ocular manifestations as uveitis and retinal vasculitis to (39) ocular BD patients and (11) non ocular BD patients
All subjects were diagnosed according to the International Study Group for Behçet's Disease in 1990[17].

Methods:

All patients were subjected to the following:

1- Full history taking
2- Full clinical examination in Rheumatology clinic
3- Full ocular examination in ophthalmology clinic
4- Short form SF-36 survey[18].
5- Visual function questioner using VFQ-25 scale[19].
6- Estimation of the Severity of the disease using the method of Yosipovitch et al., 1995[20].
7- Estimation of the Activity in last month using the method of Fresko et al., 1998 [21].

Statistical analysis of above data was done.

Quality of life assessment

SF-36*, VFQ-25*, Disease Severity and Activity

All patients were subjected to The short form 36 Health Survey (SF-36), Visual Function Questionnaire 25 (VFQ-25), Disease Severity and Activity scores to measure the status of the disease.

1) **The short form 36 Health Survey** (SF-36) It is a generic outcome measure designed to examine a person's perceived health status, also known as the medical outcome study (MOS) 36-item short form health survey.

It is a short form derived from a larger 149-item instrument and is more precise than its predecessor the SF-20. The SF-36 Health Survey include one multi item scale measuring physical function and general health perception[18].

The SF-36 Health Survey items and scales were constructed using the Likert method of summated ratings. Answers to each question are Scored. These scores are then summed to produce raw scale scores for each health concept which are then transformed to a 0 – 100 scale ,so 0 represent the lowest score and 100 represent the highest score. So, it is clear that score near to (100) indicate good general health while score near to (0) indicate poor general health.

2) **Visual function questionnaire**
VFQ-25 is survey that would measure the dimensions of self-reported vision-targeted health status that are most important for persons who have chronic eye diseases. The survey measures the influence of visual disability and

visual symptoms on generic health domains. The VFQ-25 consists of a base set of 25 vision targeted questions representing 11 vision-related constructs, plus an additional single-item general health rating question[19].

To calculate an overall composite score for the VFQ-25, simply average the vision-targeted subscale scores, excluding the general health question. By averaging the sub-scale scores rather than the individual items we have given equal weight to each sub-scale, whereas averaging the items would give more weight to scales with more items.

All items are scored so that a high score represents better function-ning. Each item is then converted to a 0 to 100 scale so that the lowest and highest possible scores are set at 0 and 100 points, respectively. In this format scores represent the achieved percentage of the total possible score. It is clearly understood that when the score is near (0) indicate poor visual function and when the score is near (100) demonstrate good visual function.

3) Disease Severity

In this study the severity of disease is measured and calculated using severity score which calculated as the sum of 1 point for each of mild symptom, 2 point for each of moderate symptom and 3 point for each sever symptom of disease (20) according to the table 1.

Table (1): Disease activity score for BD

Mild	- Oral ulcer - Genital ulcer - Typical skin lesion (erythema nodosum, papulopastular lesion, folliculitis, leucocytoclastic) - Arthralgia - Recurrent headache - Epididymitis - Mild gastro intestinal symptoms (chronic diarrhea, chronic recurrent colicy abdominal pain) - Pleuritic pain - Superficial vein thrombosis
Moderate	- Arthritis - Deep vein thrombosis of leg - Anterior uveitis - Gastrointestinal bleeding
Sever	- posterior or pan uveitis, retinal vasculities - Arterial thrombosis or aneurysm - Major vein thrombosis - Neurobehcet - Bowl perforation

Disease Activity The disease activity is measured according to the manifestations of the last 4 week and calculated as the numerical sum of the following clinical features[21] (table 2).

Table (2): Disease activity score for BD

Eye		
	0	normal
	1	cell in vitreous and or anterior chamber only
	2	vision 50%
	3	vision 30%
	4	able to see a few feet
	5	blind
Vascular involvement	**0**	normal
	1	unilateral limb DVT and or superficial vein thrombosis
	2	bilateral vein thrombosis
	3	vein thrombosis requiring bed rest
	4	thrombosis of superficial ,inferior vena cafa or hepatic vein
	5	thrombosis of both SVC and IVC or arterial occulion
Arthritis	**1**	One for each joint
Neurological involvement		
	0	
	1	intracranial hypertension
	2	multiple sclerosis-like syndrome
	3	pyramidal and or cerebellar involvement
Skin		
	0	normal
	1	Apthous stomatitis
	1	Erythema nodosum
	1	Genital ulcer

Statistical methodology

Analysis of data was done by IBM computer using SPSS (statistical program for social science version 12) as follows :

- **Description** of quantitative variables as mean, SD and range
- **Description** of qualitative variables as number and percentage
- **Chi-square** test was used to compare qualitative variables between groups.
- **Fisher exact test was** used instead of chi-square when one expected cell or more are less than 5.
- **Paired –test was** used to compare quantitative variables in the same group before and after.
- **Willcoxon sign test** was used instead of paired t-test in non parametric data (SD>50%mean).
- **Unpaired t-test** was used to compare two independent groups as regard quantitative variable .
- Correlation coefficient test was used to rank different variables positively or inversely[22].

P value >0.05 insignificant
P<0.05 significant
P<0.01 highly significant

RESULTS:

Fifty patients were included in this study. Average age of study group is 28 years and the range varies from 14 to 41 years with mean 28.3 ±7.5 SD. The majority of the studied cases were males representing 62% (31 of 50) while Female represent 38% (19 of 50) of the study group.

Duration of disease ranged from 3 to 84 month (7 years) with average duration is 27 months and mean of 28.8 ±19.2 SD.

Ocular involvement was observed in 39 patients (78%) having Behcet disease while who have no ocular manifestation were 11 patient representing only (22%) in study group.

The Statistical analysis of our study represent that the most frequent manifestation was the oral ulcer (100%), followed by arthritis and or arthralgia (92%), ocular manifestations (78%), erythema nodosum (70%), these manifestations were of highly significant value. Genital ulcers (38%), headache (20%) and dyspnea (16%) were of significant value, while the other manifestations were of non-significant value (table (5)).

Table (5): Descriptive analysis of the studied cases as regard various systemic manifestations

Items	Number of patients affected	%	P	Male	%	Female	%
Oral ulcer	50	**100%**	**<0.01 HS**	31	62%	19	38%
Genital Ulcer	19	**38%**	**<0.05 S**	14	28%	5	10%
DVT	4	**8%**	**>0.05 NS**	2	4%	2	4%
Thrombophlebitis	0	**0%**	**>0.05 NS**	0	0%	0	0%
Erythema Nodosum	35	**70%**	**<0.01 HS**	23	46%	12	24%
Hemoptysis	0	**0%**	**>0.05 NS**	0	0%	0	0%
Dyspnea	8	**16%**	**<0.05 S**	5	10%	3	6%
Pulmonary Aneurism	0	**0%**	**>0.05 NS**	0	0%	0	0%
Vacuities (Pain after meal)	3	**6%**	**>0.05 NS**	3	6%	0	0%
Arthritis	46	**92%**	**<0.01 HS**	28	56%	18	36%
Headache	10	**20%**	**<0.05 S**	2	4%	8	16%
Convulsion	0	**0%**	**>0.05 NS**	0	0%	0	0%
Ocular manifestation	39	**78%**	**<0.01 HS**	25	50%	14	28%

The majority of our patients had oral ulcer (74%) in the last month while the half of patients (54%) have ocular symptoms however the quarter of patients (24%-26%) have genital ulcer and Erythema nodosum in the last month of disease.

Ant. uvieties (60%), vitritis (40%) and vasculitis (34%) represent the majority of signs in ocular group in our study, the age of ocular patients ranged from 16 years to 41 years, there was a male predominance, and also most of patients were unilateral affection**.**

Statistical analysis show that the SF-36 score mean was 52.4±21SD, VFQ25 score mean was 59.31±28SD, activity of disease mean 6.04 ±2.8SD nd severity of disease mean 6.82±2.09 SD (table 6), chart (1).

Table (6): Descriptive analysis of the studied cases as regard SF-36, VFQ25, Activity and Severity

Items	SF-36	VFQ25	Activity	Severity
mean	52.4	59.31	6.04	6.82
±SD	21	28.63	2.89	2.09
Range	11.11-87.7	8.8-98.2	1-13	2-12

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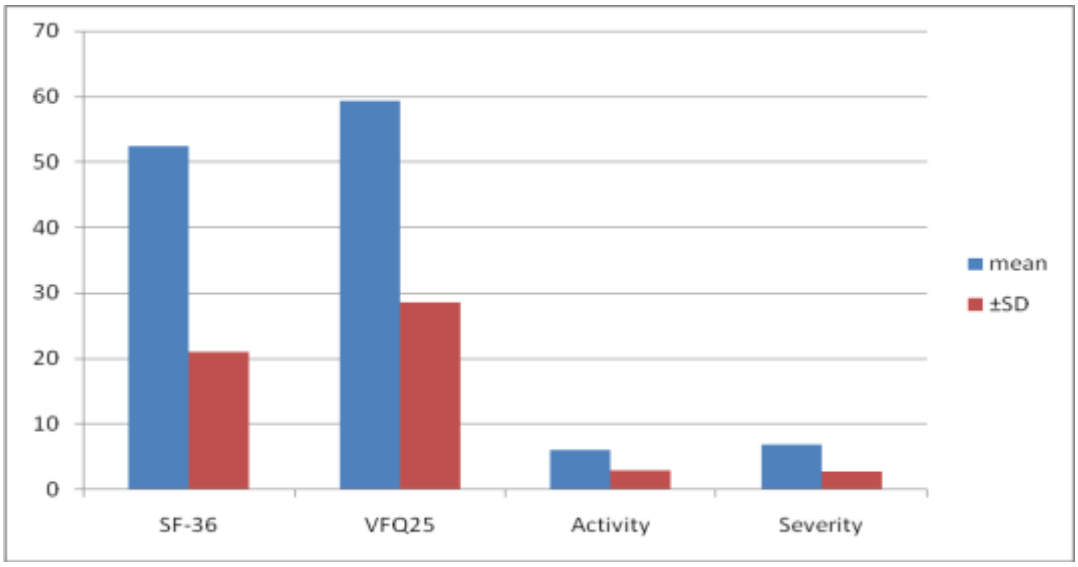


(Chart 1) Descriptive analysis of the studied cases as regard SF-36, VFQ25, Activity and Severity

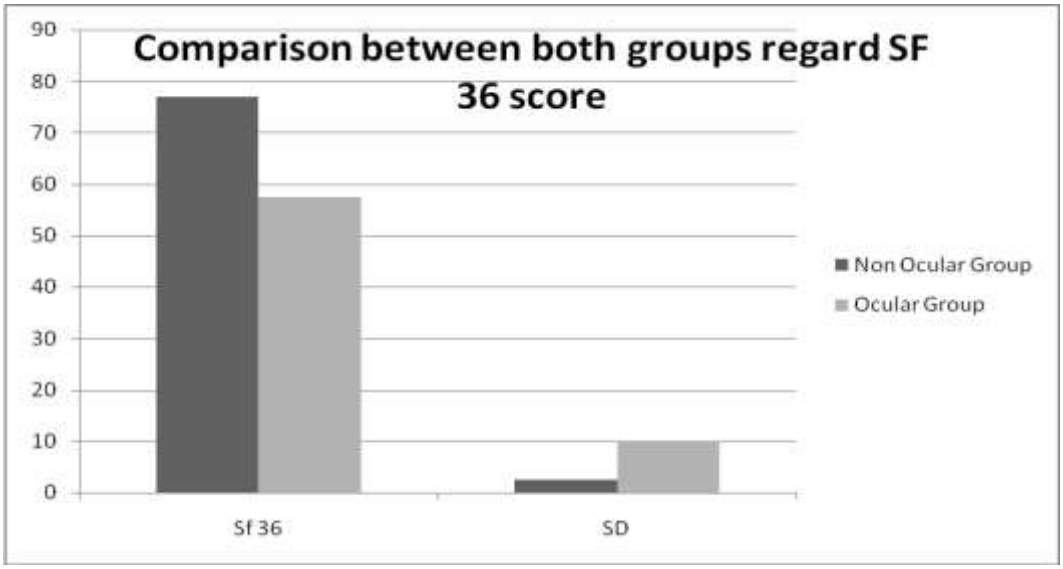
Significant negative correlation was found between Age and SF-36 with r value (-0.98) and Z value (1.16) whish clarify that increase of SFQ 36 is associated with young age**.**

Significant negative correlation between disease duration and SF36 score in study group with r value (-1.23) and Z value (2.53) whish clarify that increase of duration of disease associated with low SF36 score (as disease become worse) and cut-point at (54) **.**

Ocular group of Behcet disease has significant low SF-36 score than non-ocular group and SF-36 score in ocular group range from (46.4) to (70) with mean of (55) and SD (±5.3) while SF-36 score in non-ocular group range from (57) to (88) with mean of (75) and SD (±9.7) (table 7)&(chart 2).

Table (7): Comparison between both study groups as regard SF-36 score.

Item	Mean SF-36	Range	±SD	P
Non ocular group	75	57-88	±9.7	**>0.05 NS**
Ocular group	55	46.4-70	±5.3	**<0.05 S**



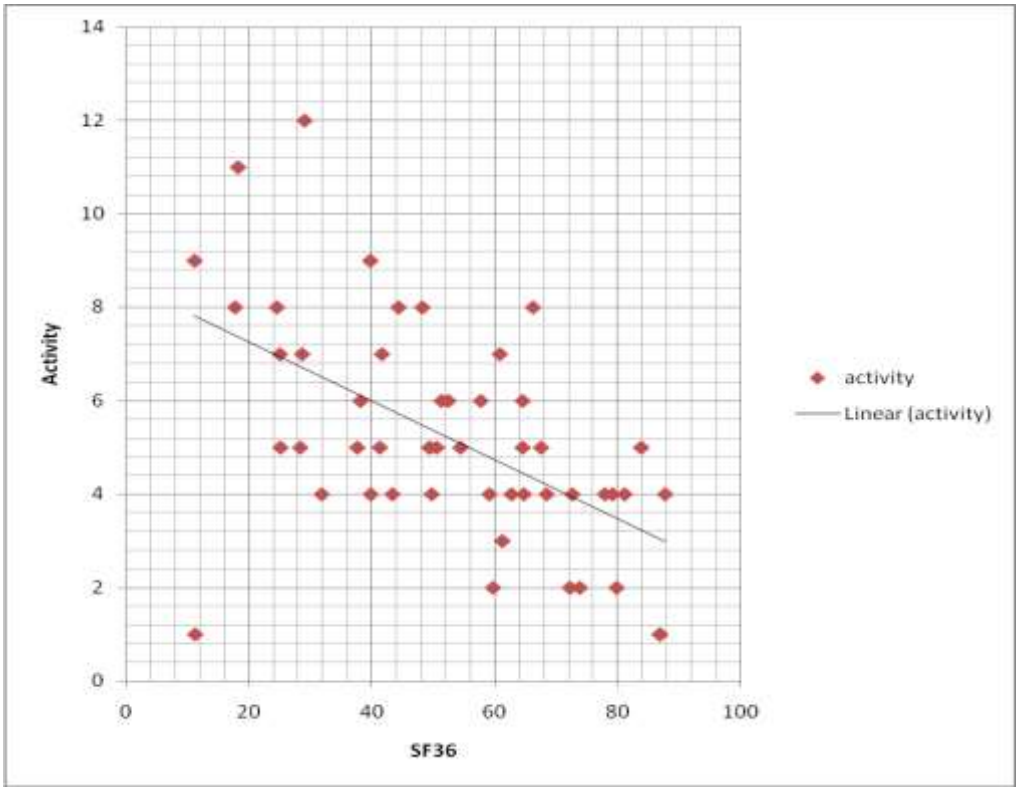
(Chart 2) descriptive analysis show that non ocular group have high SF 36 score than ocular group

The +ve pethargy test group (23%) have highly significant low SF-36 score than –ve pethargy test group (77%)**.**

There was a significant negative correlation between activity and SF36 score in the study group with r value (-1.77) and t value (3.1), in which increasing activity was associated with low SF 36 score and cut-point at (4) (table 8) & (chart 3).

Table (8): The relation between Activity of the disease and Sf-36 score

Item	P	r	t
	<0.01HS	-1.77	3.1



(Chart 3) : the relation between Activity of the disease and Sf-36 score .

statistical analysis describe the relation between Severity of the disease and Sf-36 score.

In our study there was a significant negative correlation between Severity and SF36 score in study group with r value (-0.85) and t value (1.21) as increasing severity was associated with low SF 36 score and cut-point at (8) **(table 9 & (chart 4).**

Table (9): the relation between Severity of the disease and Sf-36 score

Item	P	r	t
	<0.05 S	-0.85	1.21

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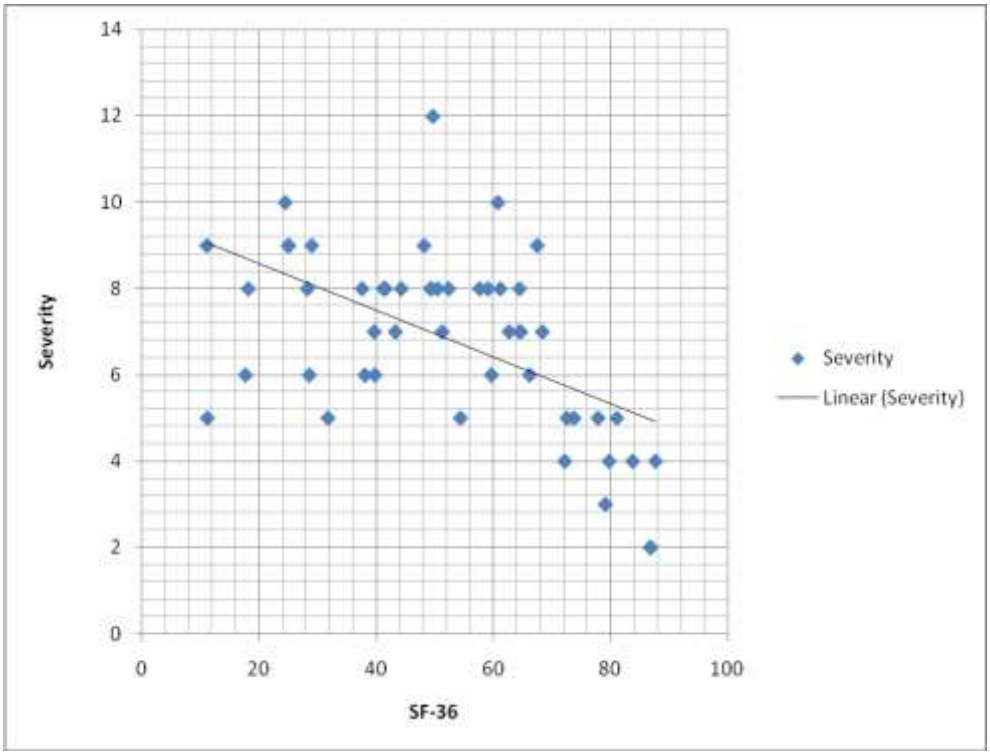


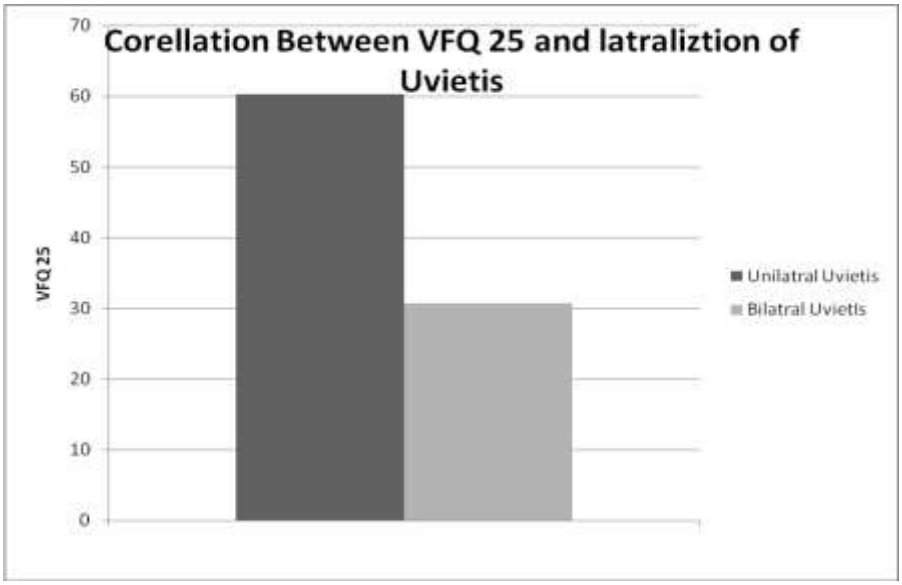
(Chart 4): the relation between Severity of the disease and Sf-36 score.

There was significant negative correlation between Age and VFQ 25 with r value (-1.23) and Z value (1.19) whish the older the age the lower the VFQ25 score and vice versa

Statistical analysis in our study show a significant negative correlation between duration of Uveites and VFQ 25 score in the study group with r-value (-2.15) and Z value (1.89) mean that the longer the disease duration, the longer VFQ 25 score**.** VFQ 25 score was signification higher in patient with bilateral ocular affection than these with unilateral disease (table 10), (chart 5).

Table (10): comparison between unilateral and bilateral uvietes regard VFQ 25 score in study group.

Item	Percentage	Mean VFQ 25 score	P
Unilateral group	**50%**	**61**	**>0.05 NS**
Bilateral group	**28%**	**35**	**<0.05 S**



(Chart 5): Comparison between unilateral and bilateral uvietes regard VFQ 25 score in study group.

There is a highly statistical significant direct correlation between SF36 score and VFQ25 score with t value (1.81) and r value (2.03) which clarifies that the high SF36 score associated with high VFQ25 score (**table 11), (chart 6).**

Table (11): Correlation between VFQ25 and SF3

Item	P	r	t
	<0.01 HS	2.03	1.81

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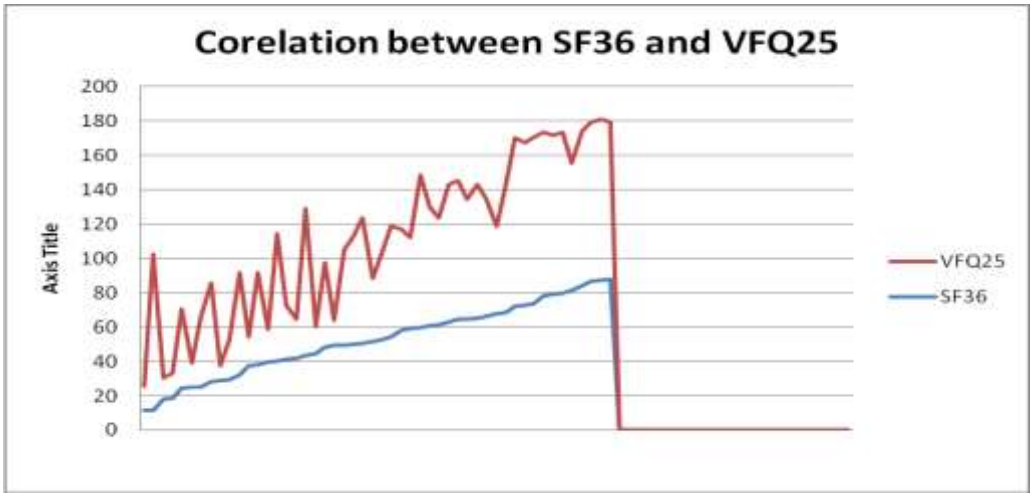

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(Chart 6): correlation between VFQ25 and SF36

DISCUSSION:

Behçet disease (BD) is a rare, chronic, lifelong disorder and a type of vasculitis that involves inflammation of blood vessels throughout the body and characterized by a triple-symptom complex of recurrent oral aphthous ulcers, genital ulcers, and uveitis[23].

Quality of life (QoL) and life satisfaction (LS) are important outcome factors in chronic inflammatory conditions such as Behcet's disease (BD), it may be necessary to assess necessarily oral health-related quality as well [24].

The results of the study were based on data obtained from Behcet patients belong to age group from (14-41) years with a mean age of our patients were (28.3). On the study of Rhett et al., 2001[25] age ranged from (19-69) years with a mean age of patients (42.3).While on the study of Onal et al., 2010[8] age ranged from (18-59) years. In the study done by Elisabetta et al., 2010[26] age ranged from (10-76) years with mean age of patient are (46.31).

Our study provided that Behcet is more predominant in a particular sex, male represent 62% while females represent 38%. So there was a male predominance (1.6:1) over females. The male to female ratio differs from 11:1 in Lebanon, 5.3:1 in Egypt, 3.8:1 in Israel, 3.4.:1 in Turkey, 1.2:1 in Iran, 1:0.9 in Germany, 1: 0.8 in Japan, 1:0.7 in Brazil and 1:0.2 in the United States[27]. On the other hand there was only one study done by Dongsik et al., 2001[28] reported male to female 1:1.75 with a slight female predominance.

We found that 78% of our patients had ocular involvement while 22% had no ocular involvement while in study of the Oliveira et al , 2011[29] it was 93.3% with ocular involvement. In Christo et al., 2003[30] study about 77% of patient was found to have ocular involvement while Dongsik et al., 2001[28] found that 50.9% had ocular involvement. The increase in frequency of ocular lesions may be due to the increase in routine tests for the eyes since the ocular lesions are considered to be one of the most important prognostic factors.

Diagnosis of Behcet disease in our study patients according to International Study Group Criteria for diagnosis of Behçet's disease 1990 revealed that :oral ulcer was the most common manifestation found in (100%) of patient followed by arthritis and or arthralgia (92%), ocular manifestations (78%), erythema nodosm (70%), genital ulcers (38%) and DVT was (8%). In study of Dongsik et al., 2001[28] the manifestations found were oral ulcers (98.8%), skin lesions (84.3%), genital ulcers (83.2%), ocular lesions (50.9%). Arthritis was seen in (64%) patients. Most of the studies agree with our study in that Oral ulcers were the most common manifestations while the other manifestations had different percentage arrangement in the different studies.

We found that the ocular manifestation on our Behcets patients (78%) where anterior uveitis (60%), posterior uveitis {vitritous (40%), vasculitis (34%), cupping of optic discs (8%), macular aedema (6%), optic disc aedema (2%), optic disc atrophy (4%)}, glaucoma (16%), cataract (12%), corneal opacity (4%), corneal ulcer (2%) and lens dislocated and sublaxated (4%). The age of patients with ocular involvement ranged from (16) to (41) years. Most of the manifestations were predominant in males than female patients and most of the patient had unilateral affection.

Kone et al., 1998[31] found that the eye inflammation, was one of the most important organ involvement of the syndrome (50%). It may manifest as uveitis or conjunctivitis. Eye disease is more commonly seen in males and younger patients.

In agreement to our study Chate et al., 2001[32] found that Behcet's patients suffer from Various ocular manifestations as anterior Uveitis, Retinal vasculitis, Retinal detachment, Retinal veno–occlusive disease, Optic neuritis, vitritios, Vitreous hemorrhage, Glaucoma, Cataract, Episclertis, Corneal ulcers , Subconjunctival hemorrhage, Conjunctivitis, Keratitis. Most of the manifestations were common in males than females.

Saleh et al., 2012[33] found that Retinal vasculitis was the most common ocular manifestation, followed by panuveitis and retinitis. Ocular manifestations were similar between male and female groups.

We found significant negative correlation between the SF-36score and the age of our patient as with increasing age the score of SF-36 was decreased which means that the young adults had high SF-36 score, The same result founded by Ware et al, 1994[34] & Ertam et al., 2009[35] so quality of life is impaired as the patient becomes older.

In our study we found that increasing the duration of the disease was associated with lower SF-36score where the negative correlation was of significant value Miserocchi et al., 2010[36]found that SF-36 scores were lower among patients with older age and with long-standing duration of the disease.

The SF-36 score of ocular group in our study were lower than non-ocular group as the comparison between ocular group and non-ocular SF36 was significant. Both Rhett M. et al., 2001[25] & Nilgün et al., 2003[37] reported that general health status were markedly lower in patients with Ocular involvement than non-ocular groups. Also Ertam et al., 2009[35] study on the evaluation of SF-36 scores, reported that quality of life is impaired in patients with eye involvement compared to non- ocular patients .It was clearly demonstrated in our study and other studies that patients with ocular Behçet syndrome had a poorer quality of life compared to non-ocular Behçet syndrome.

By analysis of SF-36score and activity score, the SF-36 score becomes highly significantly lower with increasing the activity score of the disease. In agreement with our results Athanasios et al., 2002[38] reported that the patients with active disease scored significantly lower SF-36 .

This compared with Mumcu et al., 2006[39] where the Scores of SF-36 were lower in active patients than in inactive patients in Behcet diseases. Study by Bodur et al., 2006[40] on BD patients showed a low to moderate correlation with disease activity. The above observations show that general health was impaired in patients with active BD .

We found that significant inverse correlation between SF-36 and severity as with increasing severity of the disease the SF-36 score was decreased. This finding agrees with Ertam et al., 2009[35] who found that In BD patients, "general health" showed significantly negative linear correlations with the severity of the disease.

Also proved by Onal et al., 2010[8] that a decrease inSF-36 score was correlated with an increase in the severity of the disease. However Zahi et al., 2011[41] reported showed a moderate correlation between the SF-36 score and the severity score.

The significant correlation represented by our study was that with increasing the age theVFQ-25 score was decreased. Onal et al., 2010[8] found that VFQ-25 subscale item scores were compared with respect to age show statistically significant differences according to age ,with increase age VFQ-25 score were decreased. In contrast to this finding Durrani et al.,2004[42] did not find any correlation between age and VFQ-25.

We discovered that with prolonging the duration of uveitis there was a significantly lower VFQ-25 score and bad visual function. In the two studies of Eduardo et al., 2010[43] & Taylor SR et al., 2011[44] there was strong correlation between duration of uveitis and VFQ-25 score as low VFQ-25 score associated with long standing duration of the disease.

By the study we found that patients with bilateral uveitis have lower VFQ-25 score than patient with unilateral uveitis. This is in accordance with Rhett et al ., 2001[25] & Carol et al., 2001[45] studies who showed that Patients with bilateral disease had significantly lower scores and borderline significantly lower Role Limitation scores than patients with unilateral disease.

VFQ25 scores were in direct significant correlation with visual acuity in both better and worse eye, however VFQ-25 in better eye have high score than VFQ25 in worse eye as we founded. This is compared with Dennis et al., 2009[46] who reported thatVFQ-25 scores correlated significantly with Best Corrected Visual Acuity (BCVA) in the better and worse seeing eye. Mean VFQ-25 scores varied by BCVA group with higher impairment scores seen in the lower visual acuity groups.The same result was also founded in Elisabetta et al., 2010[26].

By analysis of the data obtained from both SF-36 score andVFQ-25 score we found that there was highly significant positive correlation as high SF-36 score was associated with high VFQ-25 score and vice versa, this is in consistent with Swamy et al., 2009[47]. Eduardo et al., 2010[43] showed that patient with BS with high SF-36 score also show high VFQ-25 score. The above data clarify that the general health of Behcet disease (measured by SF-36) was in direct proportion to the visual function (measured by VFQ-25).

The study of Eduardo et al., 2010[43] demonstrated the significant effect of single symptom (especially ocular, musculoskeletal, neurological and gastrointestinal problems and skin hyperactivity) on general health.

Nilgün et al., 2003[37] discovered that patients with Behçet syndrome had a poorer quality of life (both general health and visual function) compared to their age and sex matched healthy counterparts. Therefore he recommended that, the ophthalmologist should help the patient to improve his/her quality of life by means of any available therapeutic and supportive methods. And considerable room for future research in the area of quality of life in patients with Behçet syndrome must be done.

Swamy and his colleges[47] found that vision-related quality of life [assessed using the National Eye Institute Visual Function Questionnaire (VFQ25) was influenced by both general health and health-related quality of life [assessed using Short

Form Health Survey (SF-36) questionnaire]. However, there is a relatively low correlation between the individual scales of these two quality of life questionnaires [47]

Also Tanriverdi et al., 2003[49] presented that Behçet patients with ocular involvement have poor general health and were susceptible to anxiety and depression when compared to age and sex matched controls. It is important for the ophthalmologist to know that changes in the mental state of his patient may trigger a new ocular attack, and to be aware that these changes may play a critical role in the management and preventive measures for Behçet syndrome.

CONCLUSIONS:

Ocular complications become one of the most important and common complication in Behcet patients especially after more attention for those patient and routine ocular examination and investigations.

A large number of Behcet patients had been found to have ocular abnormalities and the severity of the disease are attributed to ocular involvement of the patients, the duration of the disease and the severity of the disease.

Visual function of patients with ocular manifestation was impaired more than in non-ocular Behcet patients also Visual function are impaired more in patients with bilateral ocular manifestations than in patients with unilateral ocular involvement.

General health (quality of life) in Behcet patients was more affected in the patients with ocular involvement than non-ocular involvement patients.

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