

# CORRELATIONS OF HAQ LIFE QUALITY INDEX WITH AIMS SCORE, AT PATIENTS WITH COXITIS FROM ANKYLOSING SPONDYLITIS

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**Keywords:** *coxitis, life quality, arthritis impact*

**Abstract:** *The life quality in relation to health is the net consequence of disease and treatment on patient's perception, concerning his capacity of having a complete and fruitful life. Ankylosing spondylitis is a progressive inflammatory disease that affects the spine joints and the adjacent soft tissues. There are always affected the sacroiliac joints. The injury of coxofemoral joint, coxitis is an active lesion. The study objective: to make evident the way HAQ and AIMS correlate, for a period of 6 months at patients with coxitis from ankylosing spondylitis. The study group is made of 46 patients with ankylosing spondylitis who had coxitis.. I have determined Haq and Aims values on admission, on dismissal and after 6 months. We have found a strong correlation between HAQ and AIMS indexes on the occasion of the three determinations.*

**Cuvinte cheie:** *coxită, calitatea vieții, impactul artritei*

**Rezumat:** *Calitatea vieții, în raport cu sănătatea este consecința netă a bolii și tratamentului asupra percepției pacientului, privind capacitatea sa de a avea o viață deplină și utilă. Spondilita anchilozantă este o boală inflamatorie progresivă, care afectează articulațiile de la nivelul coloanei vertebrale și țesuturile moi adiacente. Afectarea articulației coxofemorale, coxita, este o leziune activă, mai mult sau mai puțin precoce. Obiectivul studiului: evidențierea modului în care se corelează scorul HAQ și AIMS, pe o perioadă de 6 luni la pacienții cu coxită din spondilita anchilozantă. Lotul de studiu este format din 46 de pacienți cu spondilită anchilozantă, care prezentau coxită. Am determinat valorile Haq și Aims la internare, externare și la 6 luni. Am constatat o puternică corelație între scorurile HAQ și AIMS cu ocazia celor trei determinări.*

## INTRODUCTION

The life quality in relation to health is the net consequence of disease and treatment on patient's perception, concerning his / her capacity of having a complete and fruitful life.

Ankylosing spondylitis is a progressive inflammatory disease that affects the spine joints and the adjacent soft tissues. There are always affected the sacroiliac joints.

The injury of coxofemoral joint, *coxitis* is an active lesion, more or less precocious, concerning all joint elements. It can appear on debut, difficult diagnosis, especially in spondylitis with debut in childhood or adolescence.

In the \* 80's, the concept of self-managed questionnaires become more accepted for the evaluation of rheumatic disease, when the „Health Assesment Questionare” (HAQ) and „Arthritis Impact Mesurement Scales” (AIMS) were published. These were mainly conceived to evaluate the polyarthritis patient's state of health. Later on, several studies showed that both instruments are thrustful, valid and sensitive to change, both as concerns the clinical research purpose and the practical research. Haq was modified for its use in AS, HAQ-S, adding the areas for ADL-s, that were modified at patients with spondylosis(4).

AIMS questionnaire was introduced in 1980 to evaluate the functional status of rheumatic patients (1,2,4). The questionnaire is made of 45 questions grouped in 9 scales that can be combined to investigate the various components of the state

of health. AIMS was analysed under the aspect of statistic credibility and validity, of sensitivity to change and utility to different population of arthritis patients (1,3,4). AIMS 2 is an extended and updated variant of AIMS original battery, at which there were added new scales, to complete the original version, that measures mobility, walk and bending, the function of hands and fingers, selfcareing, home activities, joint pain, the state of psychical tension and the disposition. The questionnaire is made of scales that can be used separately, depending on the field of activity we want to investigate(5,6).

## THE STUDY OBJECTIVE

An objective of this study was to make evident the way HAQ life quality score and AIMS correlate, the index that determines the arthritis impact, for a period of 6 months at patients with coxitis from ankylosing spondylitis.

## MATERIAL AND METHOD

The group of AS patients is made of 46 males, stage IV. According to the data from the literature, this pathology is specific to males.

The age of AS patients is between 22-78 years old.

The time interval from the moment the spondylitis was diagnosed until the moment of coxites diagnosis is between 0 and 30 years. The number of hip prostheses at patients taken in the study was 5.

We have determined the Haq and Aims values on

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## CLINICAL ASPECTS

admission, on dismissal and after 6 months.

The correlation coefficient is a quantitative value that describes the relation between two or more variables. It varies between  $-1$  and  $+1$  values. A perfect relation has  $+1$  or  $-1$  value, and a total lack of relation has  $0$  value.

The correlation can be *positive* or *negative*.

The higher the value of the correlation coefficient in absolute value, the more dependent are the two variables – the dependent variable is more strongly influenced by the independent variable.

### RESULTS

The clinic success was defined by diminished pain or disappearance of pain at hip level, and as concerns the life quality, the success was showed by the diminishing of HAQ and AIMS index values.

HAQ index has values between  $0,375$  and  $2,25$  on admission, between  $0$  and  $2$  on dismissal, and after one year, the score varies between  $0,375$  and  $2,875$ .

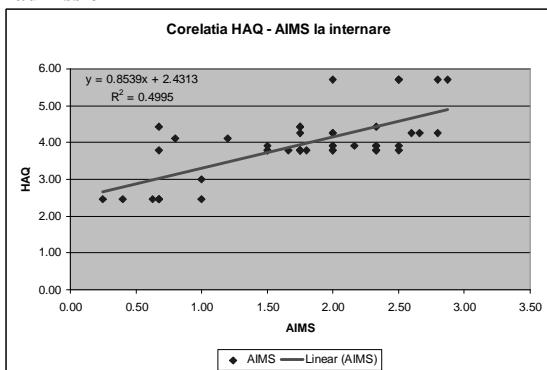
AIMS2 index values were between  $5,7$  and  $2,1$ .

**Table no. 1. Value of correlation coefficients**

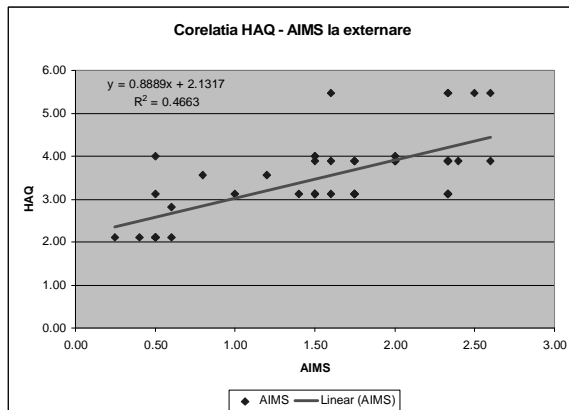
ITEMS	Age	Debut
Age	1	0,22
Debut	0,22	1
HAQ admission	-0,02	0,14
HAQ dismissal	-0,13	0,05
HAQ after six months	-0,37	-0,05
HAQ after one year	-0,22	0,06
AIMS physical on admission	0,12	0,20
AIMS functional on admission	0,00	0,17
AIMS pain on admission	-0,12	0,12
AIMS work on admission	-0,24	0,10
AIMS psychic on admission	-0,11	0,06
AIMS physical on admission	0,01	0,19
AIMS functional on dismissal	-0,06	0,14
AIMS pain on dismissal	-0,05	0,15
AIMS work on dismissal	-0,09	0,12
AIMS psychic on dismissal	0,05	0,16
AIMS admission	0,17	0,17
AIMS dismissal	0,14	0,18
AIMS after six months	0,15	0,19

The objective of this study was to make evident the correlation between the parameters in question. We have found a strong correlation between HAQ and AIMS index.

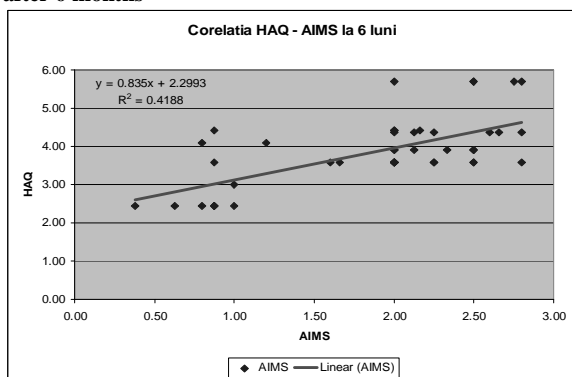
**Graphic. no. 1. Correlation between HAQ and AIMS index on admission**



**Graphic. nr. 2. Correlation between HAQ and AIMS index on dismissal**



**Graphic. nr. 3. Correlation between HAQ and AIMS index after 6 months**



### CONCLUSION

We have found a strong correlation between HAQ and AIMS index on all determinations, therefore the life quality is strongly influenced by the presence of arthritis at patients with ankylosing spondylitis, which was actually expected.

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