

| <i>University of Baghdad</i>            |   |                      |            |          |  |
|---|---|----------------------|------------|----------|--|
| <b>College Name</b>                     | <b>MEADICIAL</b>  |                      |            |          |  |
| <b>Department</b>                       | <i>Rheumatology</i>   |                      |            |          |  |
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| <b>e-mail</b>                           |   |                      |            |          |  |
| <b>Career</b>                           | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">☉ Assistant Lecturer</td> <td style="text-align: center;">☉ Lecturer</td> </tr> <tr> <td style="text-align: center;">☉ Master</td> <td></td> </tr> </table>   | ☉ Assistant Lecturer | ☉ Lecturer | ☉ Master |  |
| ☉ Assistant Lecturer                    | ☉ Lecturer  |                      |            |          |  |
| ☉ Master                                |   |                      |            |          |  |
| <b>Thesis Title</b>                     | <b>Body Mass Index and Clinical Response to Infliximab in Ankylosing Spondylitis Patients</b>   |                      |            |          |  |
| <b>Year</b>                             | <b>2015</b>   |                      |            |          |  |
| <b>Abstract</b>                         | <p><b>Ankylosing spondylitis is a chronic inflammatory disease that affect the axial skeleton(spine and sacroiliac joints) , peripheral joints, enthesitis and specific organ involvement such as anterior uveitis, aortic valve disease. The hall mark of AS is inflammatory back pain associated with radiographic sacroiliitis and often spondylitis. Obese patient and excess of body fat is associated with increase in the severity and prevalence of rheumatic diseases, a rough measure of obesity is the body mass index BMI which is the body weight in Kilogram divided by the square of the height in meter.</b></p> <p><b>Aim of the study:</b><br/> <b>To evaluate body mass index as indicator of response to therapy in Ankylosing spondylitis patients receiving infliximab.</b></p> <p><b>Patient and method:</b><br/> <b>This is a retrospective study, data were collected from the records of patients attending the rheumatology department in Baghdad hospital to receive infliximab for treatment of ankylosing spondylitis. All patient included were diagnosed with the modified New York criteria for classification of ankylosing spondylitis. Data include patient age , sex, dis duration, HLA-b27, smoking, and patient weight and height, clinical response assessment by bath ankylosing spondylitis disease activity index BASDAI at time of initiation of treatment and six month later, amount of non-steroidal anti-inflammatory drugs NSAID at time of initiation of treatment and six month later. Excluded from the study those who discontinue infliximab either because of non-availability or absence from treatment session, patients who had been taking steroid before treatment with infliximab and those on other disease modifying ant rheumatic drugs.</b></p> <p><b>Patient were categorized into three groups according to their BMI (normal &lt;25kg/m2 , overweight&lt;30kg/m2 and obese &gt;30kg/m2) and clinical response were calculated for each group of patients.</b></p> |                      |            |          |  |

**Results:**

**Total number of patient in this study are 170, There are 158 male patient (92.9%) and 12 female patient (7.1%). 60 patients (35.3%) has normal**

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**body weight, 59 patients (34.7%) were overweight and 51 patient (30.0%) were obese.**

**At time of initiation of infliximab therapy all patient have active disease with mean BASDAI (5.5 for the normal weight group, 5.4 for the overweight group and 6.1 for the obese weight group) and a full dose of NSAID being used for the three categories.**

**Multivariate analysis found that BMI was the only factor associated with statistically significant relation to response after six month of treatment. Higher BMI associated with a lower response for BASDAI50 (p value <0.001) and for NSAID50 (p value<0.001). this study show that other variables are not statically significant to predict response to treatment six months after initiation of Infliximab.**

**Number of patient who didn't respond to treatment with infliximab was higher among patients with higher BMI.**

**Conclusions:**

**This study provide an evidence that obesity and excess of body fat in patients with Ankylosing spondylitis is associated with lower response rate to infliximab treatment.**