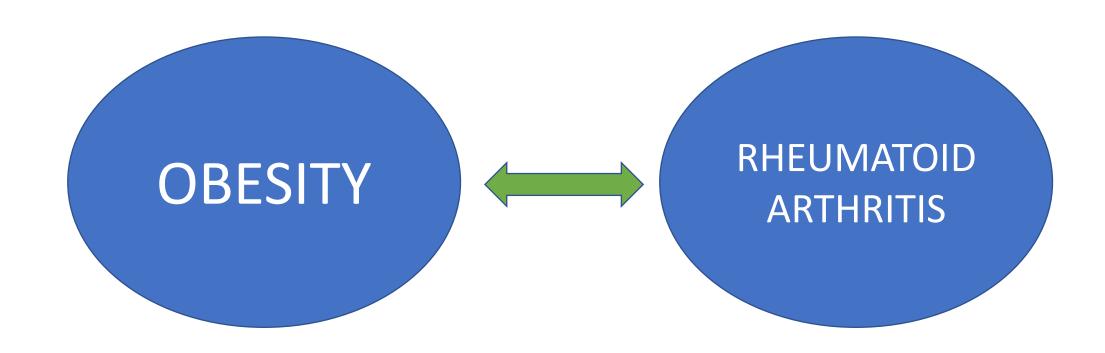
DAS-28 vs. CDAI in obese RA patients

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Why was this study done?



INTRODUCTION

- DAS28-ESR, DAS28-CRP, and CDAI are integral to 'Treatment to Target'
- With the exception of CDAI, the other two use inflammatory markers ESR and CRP to measure disease activity.
- Obesity is known to increase inflammatory markers like CRP.^[1]
- Does obesity confounds the disease activity measurement in RA leading to overestimation of disease activity was evaluated.

OBJECTIVES:

- To examine the impact of obesity on commonly used disease activity indices.
- To differentiate whether the proposed impact is due to clinically assessed increased disease activity or solely due to increased inflammatory markers.
- To compare the validity of disease activity indices in obese RA patients.

METHODS

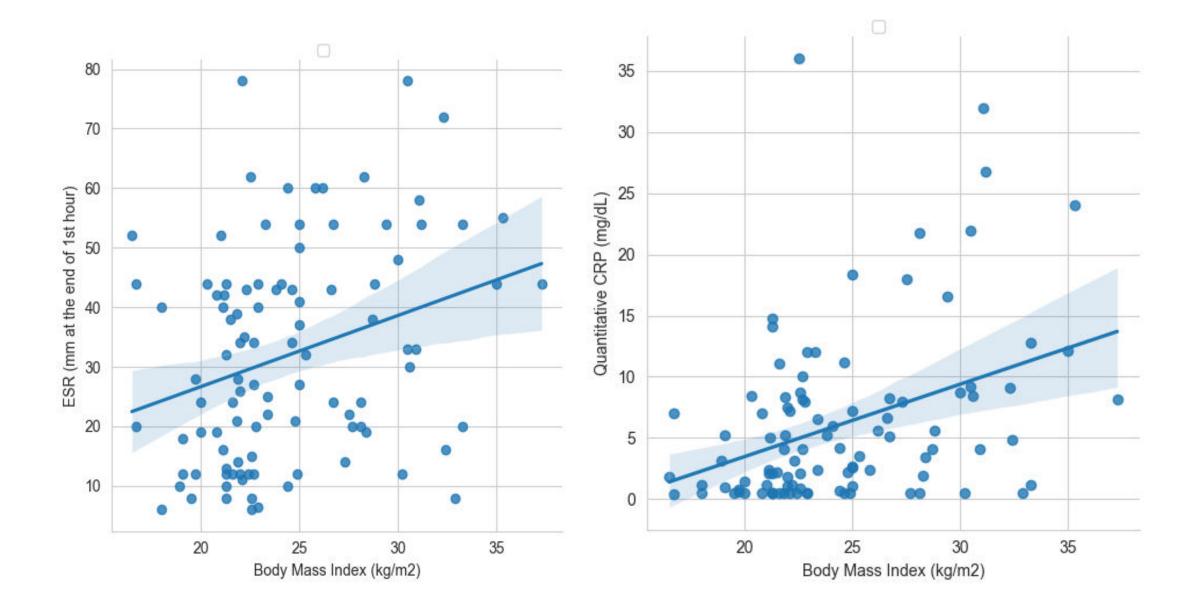
- 1. 100 adult patients of RA
- 2. Divided in two groups: obese (40) and non obese (60)
- 3. Parameters assessed:
 - Clinical: height, weight, Body Mass Index (BMI) and abdominal circumference
 - Laboratory: Complete blood count (CBC), ESR by Westergren's method, CRP,
 Liver and Kidney function tests.
 - Indices calculated: DAS28-ESR, DAS28-CRP, CDAI
- 4. Analysis was done using Epi-Info, JASP and Statistical Package for Social Sciences (SPSS) version 23.0

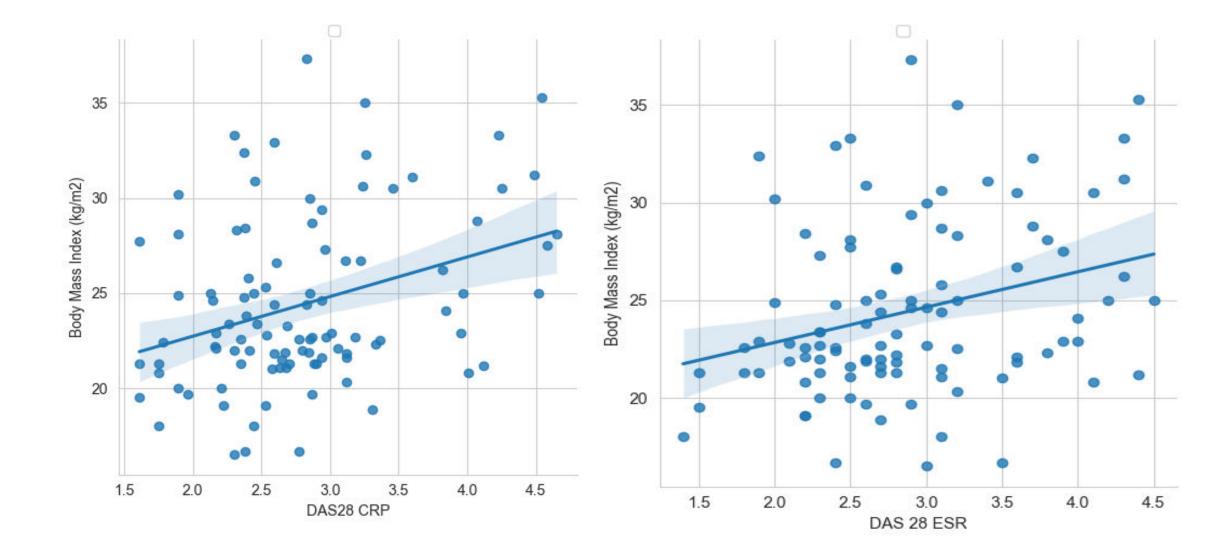
• EXCLUSION CRITERIA:

- 1) Pregnant females.
- 2) Patients with evidence of active infection or history of any infection in the last one month.
- 3) Active smokers.
- 4) Major surgery in past 3 months.
- 5) Uncontrolled hypothyroidism.
- 6) ACS patient in the last 1 month.
- 7) Chronic steroid user or use of steroids in last 1 month.
- 8) Known case of diabetes mellitus.
- 9) Patients with overlap with other connective tissue disorders.
- 10)Patient on biologicals
- 11)Patients with Moderate and Severe disease activity by CDAI score.

RESULTS

PARAMETER	OBESE-MEDIAN(IQR)	NON OBESE- MEDIAN(IQR)	P- VALUE
ESR mm 1st hour	37.5 (21.5-54)	24.5 (12-42)	0.007
CRP (mg/dL)	5.6 (2.28-9.92)	2.3 (0.76-7.05)	0.017
CDAI	4.5(3.0-8.0)	3(2.0-6.0)	0.056
DAS28-ESR	3.05(2.6-3.7)	2.6(2.3-3.1)	0.002
DAS28-CRP	2.86(2.4-3.66)	2.64(2.3-2.94)	0.031





CONCLUSIONS

- DAS28 overestimates disease activity in obese RA patients.
- CDAI remains relatively unaffected by confounding effect of obesity on disease activity measurement.
- Interpretation of inflammatory markers in obese RA patients warrants caution.



Thank you

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