

Resource

## The link between RA and obesity

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2017

Researchers have discovered that obesity in women may have an impact on blood test results used to detect rheumatoid arthritis. The results shown in Arthritis Care & Research, indicate that doctors may need to consider obesity as a factor when taking the tests.



The two blood tests: C-reactive protein (CRP) and ethrocyte sedimentation rate (ESR) are both used by doctors to assess levels of inflammation in the body.

There has been some evidence of links between higher levels of CRP and ESR with a higher body

mass index. Michael George MD MSCE, based at the University of Pennsylvania Health System, and his colleagues worked to determine the extent obesity has on these markers. The team studied the information on over 2000 people with rheumatoid arthritis and compared it with statistics from the general population.

Evidence has shown that in women with rheumatoid arthritis and in the general population, a higher BMI was associated with a higher CRP. This was especially the case among women with severe obesity. There was also a connection between obesity and ESR in women. The connection between the two was also seen in men in the general population, but the connection between obesity and inflammation did differ in men with rheumatoid arthritis. In said individuals, lower BMI was linked with higher CRP and ESR. This result may be significant for understanding the connection between weight and inflammation, and how it may be different between male and female.

“Our results suggest that obesity may lead to increased levels of CRP and ESR in women with rheumatoid arthritis,” said Dr George. “The increase in these levels of inflammation was not because rheumatoid arthritis was worse in these women. In fact, we found that obesity leads to very similar increases in these lab tests even in women without rheumatoid arthritis.”

Dr George did state that doctors need to be cautious when understanding the tests as both rheumatoid arthritis and obesity can contribute to levels of inflammation. “Doctors may assume that high levels of inflammation mean that a patient has rheumatoid arthritis or that their rheumatoid arthritis requires more treatment when in fact a mild increase in levels of inflammation could be due to obesity,” he explained.

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