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Evaluating C-Reactive Protein Associated Risk of Cardiovascular Disease in Patients with Autism Spectrum Disorder

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Evaluating C-Reactive Protein Associated Risk of Cardiovascular Disease in Patients with Autism Spectrum Disorder

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Abstract

This study examines the relationship between C-reactive protein (CRP) levels and cardiovascular disease (CVD) risk in 293 patients with Autism Spectrum Disorder (ASD) from the Rowan-Virtua Regional Integrated Special Needs Center (RISN Center). Baseline CRP values were gathered from EMR and evaluated for CVD risk. ASD patients have increased prevalence of CVD risk factors, and the literature demonstrates a strong relationship between CRP and CVD risk in this population. Patients were stratified by severity of ASD to investigate potential differences. Severe limitations in EMR data and overall sample size limited the generalizability and significance of this study. Larger scale studies with ample serum CRP values are needed to adequately assess CVD risk in the RISN Center's ASD patient population. Regular monitoring and evaluation of CRP levels in ASD patients could lead to better management of cardiovascular health in patients with ASD.

Background

CRP Level & Risk of Cardiovascular Disease

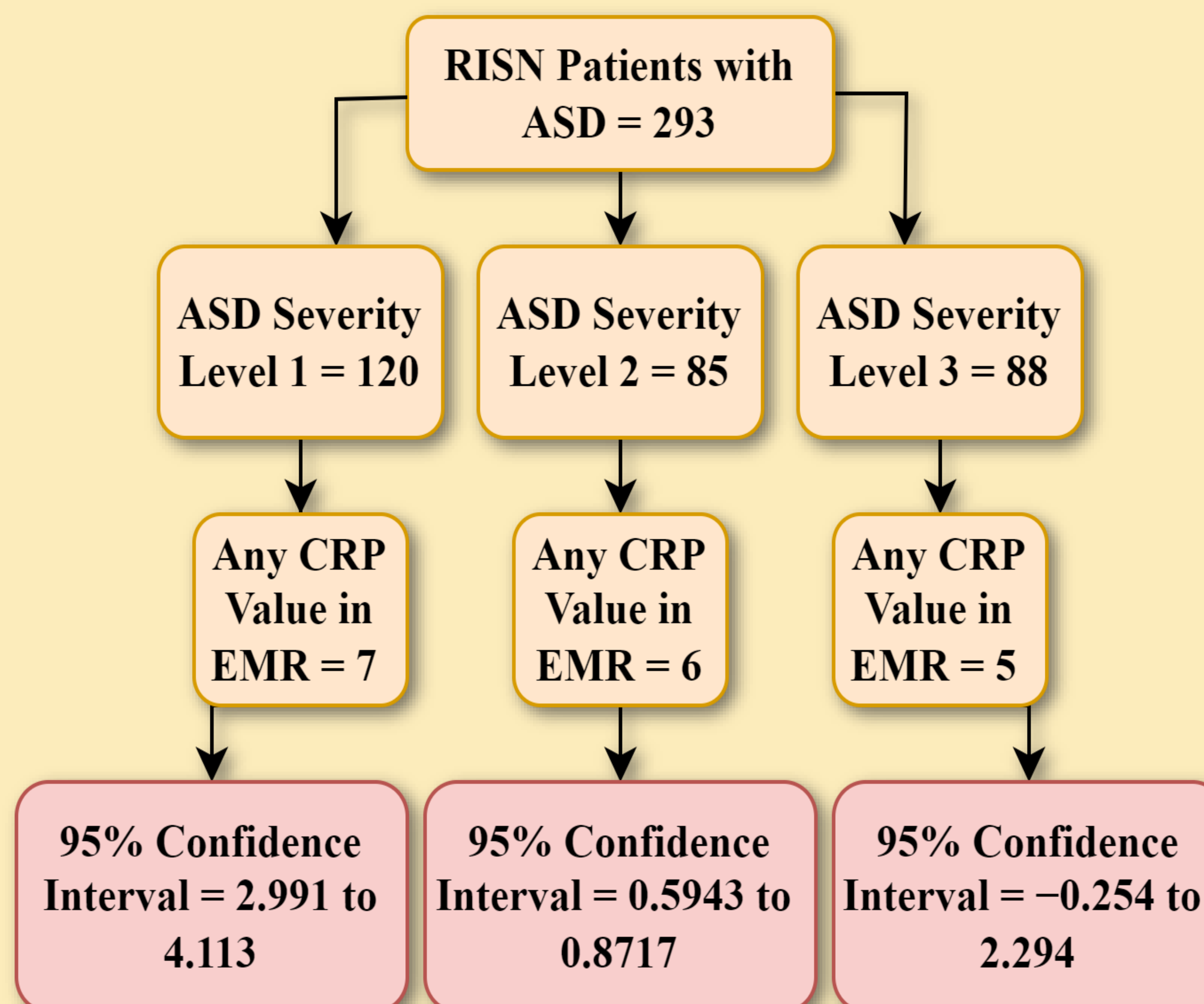


Despite increased prevalence of CVD risk factors, limited research has been conducted on this relationship in patients with ASD.

Methods

Clinical data from RISN Center patients diagnosed with ASD (F84.0) was stratified by severity level and compared to previous studies.

Results



Conclusion

Limited population CRP data severely dampened the significance and generalizability of the study. Additionally, the CRP values recorded may not have resulted from the patients' ASD.

It may be advantageous to regularly monitor CRP levels in ASD patients to quantify CVD risk and promote preventative healthcare.

Future studies involving large cohorts of patients and frequent, recorded CRP levels may provide statistically significant and representative data.



Discussion

The main limitation of this study is that only 6.1% of the population had a CRP level recorded in EMR. Contextually, it is not possible to draw a representative conclusion on an association between CRP level and severity of ASD.

References & Acknowledgements

