
First evaluation of the national risk assessment tool for adolescent anorexia nervosa (AN) treatment in the UK (the Junior MARSIPAN)

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INTRODUCTION

Anorexia nervosa is characterised by severe dietary restriction, resulting in rapid weight loss and malnutrition, leading to physical health consequences including bradycardia, and low blood pressure. The Junior MARSIPAN tool is a helpful systematic way to assess this physical risk in AN. Decisions on paediatric admissions are predominantly based on physical risk as assessed by this tool, which, despite being used nationally, has never been evaluated. In addition to management of physical risk, acute admissions play a key role in improving engagement of families with the treatment plan.

METHODS

Preliminary systematic review and meta-analysis of published data looking at associations between degree of underweight and risk of medical instability (as defined by the domains within the Junior MARSIPAN risk assessment tool) in adolescents with AN. This will be followed by a prospective study gathering patient data on medical markers, included in the Junior MARSIPAN tool, and risk of hospital admission in this patient group across multiple UK sites. Medical markers will include those named in the tool, such as heart rate, blood pressure, rate of weight loss and biochemical markers relate to starvation. Likeart scales will be used to collect information on clinician perceptions of the key factors influencing their decisions to admit or not admit. Again, the Junior MARSIPAN tool physical health domains, in addition to factors such as engagement with the treatment plan and time between referral and treatment will be used within this scale. Data will be compiled from all study phases to evaluate how well the tool predicts risk of paediatric admission, and, how different services use the current tool.

RESULTS

Initial results have identified bradycardia, low blood pressure and rapid weight loss as medical markers of interest, with a significant association between low blood pressure and degree of underweight in this patient group. Further data analysis is expected to support these findings, as well as support the paediatric admission as an important therapeutic intervention, used by services to improve engagement in addition to physical health.

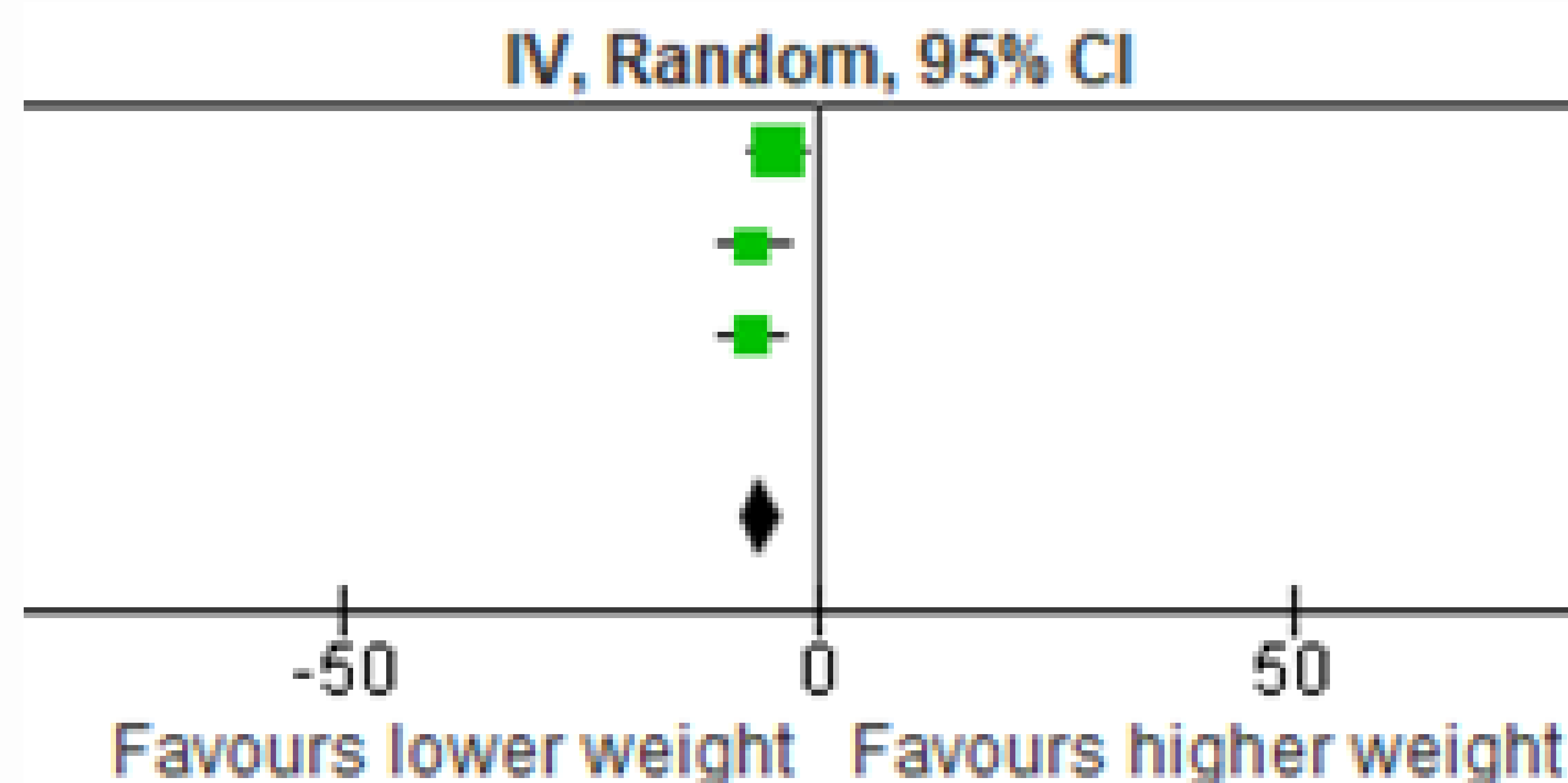


Figure 1. Forest Plot showing the association between degree of underweight and low systolic blood pressure in adolescents with AN

CONCLUSION

Preliminary recommendations advocate low blood pressure as key admission criteria in national guidance. Qualitative evidence supports bradycardia and rapid weight loss as other key markers that indicate an increased risk of physical deterioration and need for paediatric admission. Further analysis of prospective data will identify other markers that will aid determination of patients in need of admission, as well as benefits that surpass physical risk management.
