Introduction Prognostic factors in patients on home parenteral nutrition (HPN) are primarily thought to be related to the underlying disease. To the best of our knowledge, there is no data so far pertaining to long-term cardiovascular disease (CVD) risk in these patients. We aimed to review our cohort of HPN patients to assess their 10-year CVD risk using the validated QRisk2 score and to explore possible associations between HPN and CVD.

Methods We conducted a retrospective observational study of patients on HPN using the Leeds HPN database. We included all patients on parenteral nutrition (PN) and parenteral fluids (PF). Further relevant data such as smoking history, blood pressure, etc. were collected at outpatient clinics and their respective general practitioners. Data were entered into an online calculator to obtain QRisk2 scores and analysed using Microsoft Excel. We also reviewed the indication for HPN and assessed their association with CVD risk.

Results A total of 73 patients were included in this study. Their mean age was 53.12 years (range 19 to 83 years) with male:female ratio of 40:60. 78.08% patients were on PN and 21.91% on PF. Indications for HPN are summarised in the pie chart below. QRisk2 score of $\geq 20\%$ (classed as ‘high risk’ for CVD) was noted in 18.06% patients. Of the patients with high CVD risk, ischaemic bowel was the underlying indication for HPN in 33.65%. Crohn’s disease in 18.18%, GI malignancy in 9.09% and miscellaneous indications in 36.36% (including dumping syndrome, enterocutaneous fistula, refractory coeliac disease and diverticular perforation).

Conclusion No study has so far assessed the possibility of a link between HPN and CVD risk. From our pilot retrospective study, 15% patients on HPN were found to have a high 10-year CVD risk. This could potentially have an impact on the overall outcome of this subgroup of chronically ill patients, which needs to be evaluated further. More than a third of patients with high QRisk2 had had ischaemic bowel. Limitations of our study are its retrospective nature and smaller numbers. It is not clear whether the type and volume of HPN could have any impact on their long-term CVD risk. Future research should perhaps focus on further exploring the possible link between CVD and HPN, in the form of a large prospective trial of patients on HPN.

Disclosure of Interest None Declared.

REFERENCES

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