INTRODUCTION

Hepatic steatosis is a highly prevalent condition in people living with HIV (PLWH) [1]. Current clinical investigations such as ultrasound and Fibroscan™ can detect the condition but are often time-consuming and may not be widely available in resource-poor environments. Hepatic steatosis shares common aetiologies with other common metabolic co-morbidities such as insulin resistance and Type 2 Diabetes Mellitus [2].

In routine clinical practice, anthropometric and clinical data are often collected as part of screening processes to guide clinical management. Given the burden of metabolic dysfunction such as in hepatic steatosis, it would be prudent to routinely assess for this condition in clinical practice using data that are already collected as per normal protocols.

HYPOTHESIS & AIMS

Hepatic steatosis is significantly correlated in people living with HIV and anthropometric factors can significantly predict affected patients.

We aimed to investigate hepatic steatosis prevalence in our cohort of PLWH and whether anthropometric data previously collected can be used to predict this condition.

RESULTS AND DISCUSSION

Of 338 patients sampled, 71 (21%) had a confirmed diagnosis of hepatic steatosis, with age, dysglycaemia and body mass index category all significantly associated with risk (p<0.05 for all). Waist and waist:hip ratios signifying central obesity were significantly associated with hepatic steatosis (p<0.001).

ROC Curve of Waist: Hip Ratio greater than cut-off vs Hepatic Steatosis

Figure 1. Waist:Hip Ratio greater than the WHO cut-off vs Hepatic steatosis

ROC Curve of Waist Circumference greater than cut-off vs. Hepatic Steatosis

Figure 2. Waist circumference greater than the WHO cut-off vs Hepatic steatosis

As such, we provide our recommended cut-offs per our results:

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europids, African/Afro-Caribbean</td>
<td>&gt;101 cm</td>
<td>&gt;91 cm</td>
</tr>
<tr>
<td>South/East Asian, Central/South Americans</td>
<td>&gt;105 cm</td>
<td>&gt;91 cm</td>
</tr>
</tbody>
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CONCLUSIONS

1. Waist:hip ratio and waist circumference can effectively predict hepatic steatosis risk in PLWH and may identify individuals suitable for further investigation.
2. Waist:hip ratio is more sensitive and specific than waist circumference alone.
3. The measurements are non-invasive and can be done by any healthcare professional using standardised criteria.