

# Dyslipidaemia: Prevalence and Management in the Paediatric HIV Cohort in Bristol and the South West Region

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## Background

- Due to the success of HAART, HIV is now a chronic disease with patients being more likely to die from non-AIDS related events than AIDS related events, in particular cardiovascular disease
- HIV is a moderate risk factor for atherosclerosis due to HIV itself and HAART (especially protease inhibitors)
- Dyslipidaemia is associated with the development of atherosclerosis

## Aims

- To assess the prevalence of dyslipidaemia using the National Heart Lung and Blood Institute (NHLBI) paediatric population reference ranges<sup>1</sup>
- To audit management against the CHIVA guideline on dyslipidaemia<sup>2</sup>

## Methods

- Cohort: All paediatric HIV patients (≤ 18 years old) seen across the South West
- Timescale: Patients managed in the South West January-December 2014
- Data recorded and analysed in Excel: mean LDL and HDL cholesterol, mean triglyceride, BP, weight, height, BMI, completion of annual dietetic review and medical management of dyslipidaemia

## Results 1: Prevalence of dyslipidaemia in cohort

Figure 1: Lipid values (mean of 2 non-fasting) compared to NHLBI population reference ranges<sup>1</sup>

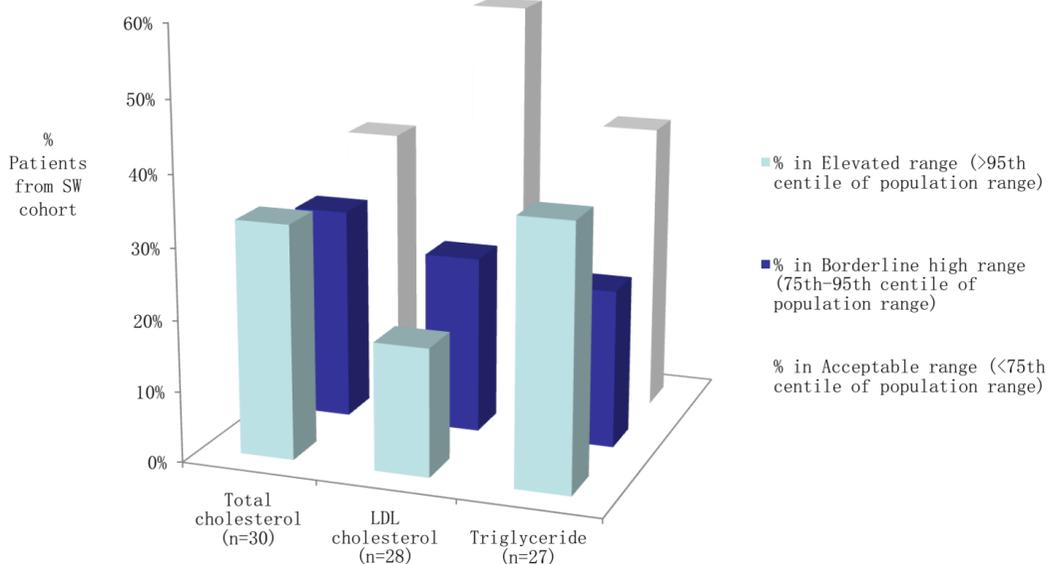
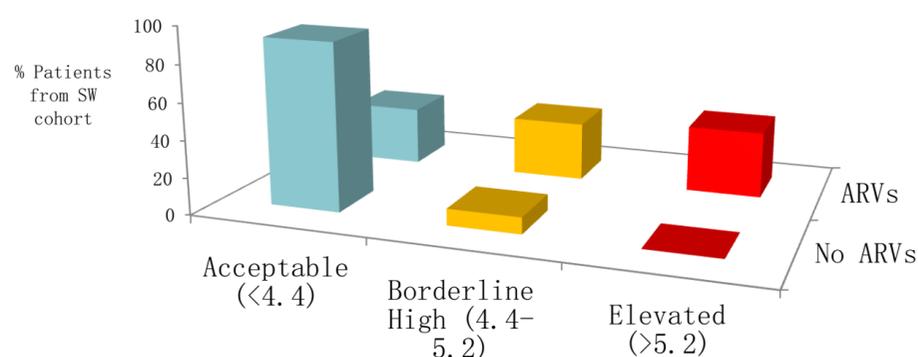


Figure 2. Total cholesterol (mmol/L) according to treatment



## Results 2: Audit of management against CHIVA guidance

Figure 3: % patients in whom CHIVA standards were met

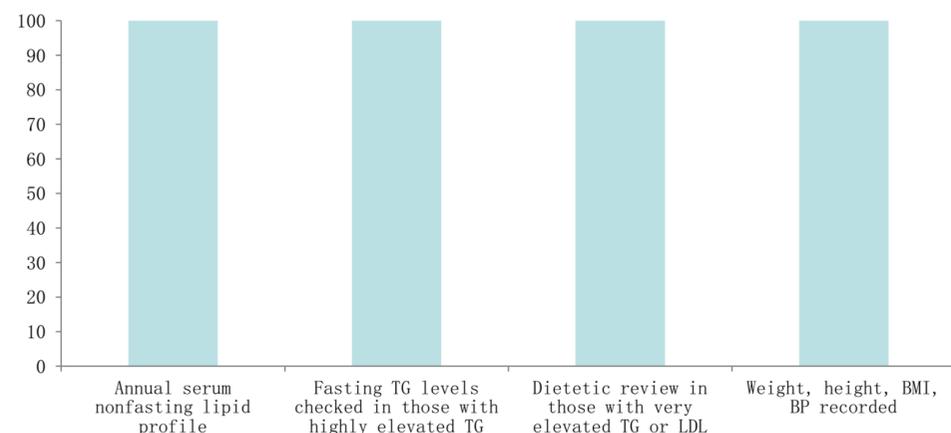


Table 1: Medical management

- No patient met the threshold for consideration of statin therapy
- 3 patients had highly elevated lipid levels
  - All had treatment regime reviewed and optimised by MDT
  - Lipid levels improved following treatment regime change

## Conclusions

- Total cholesterol, LDL cholesterol and triglyceride levels were higher than population normal values in our cohort
- The CHIVA dyslipidaemia guidance was followed in all our patients in terms of monitoring and medical management
- Following this audit our specialist dietician now visits all regional clinics to ensure all patients have an annual dietetic review rather than just those seen at the central clinic

## References

1. National Heart, Blood, Lung Institute (NHLBI). Expert panel on integrated guidelines for cardiovascular health risk reduction in children and adolescents.

<http://www.nhlbi.nih.gov/health-pro/guidelines/current/cardiovascular-health-pediatric-guidelines/>

2. Lanigan J, Cooke L, Stradling C, Tan A. Management of dyslipidaemia in HIV infected children: treatment algorithm. [http://www.chiva.org.uk/files/1314/3575/3346/HIV\\_dyslipidaemia\\_final\\_2015.pdf](http://www.chiva.org.uk/files/1314/3575/3346/HIV_dyslipidaemia_final_2015.pdf)