



Non-uptake of highly active antiretroviral therapy among patients with a CD4 count <350 cells/mL in the UK

Why was this research done?

This study was performed to identify the factors that predict whether patients start or delay ART.

What was done in this research?

The characteristics of HIV positive individuals (with a CD4 count <350 cells/mL) and the time until they started ART were monitored to identify what characteristics resulted in rapid or delayed uptake of ART.

What were the results of the study?

Characteristics that were found to increase the likelihood of patients initiating ART following a CD4 count <350 cells/mL were:

- A previous AIDS diagnosis
 - Older age
- Follow up to a later calendar year
- Greater number of CD4 measurements <350cells/mL
 - Lower CD4 count over follow up
 - More rapidly declining CD4 count
 - High viral load
- Being a female exposed through heterosexual sex

Characteristics shown to delay commencement of ART were:

- Exposure through injection drug use
- A high CD4 percentage

Why was this research important?

Failure to start ART in good time is associated with increased risk of death. By identifying which patient characteristics lead to delayed uptake it is possible to identify those most likely to have a poor outcome.

Further information about the UK CHIC Study can be found at www.ukchic.org, or by e-mailing Memory Sachikonye (memory.sachikonye@ukcab.net).

Kober C, et al., *Non-uptake of highly active antiretroviral therapy among patients with a CD4 count <350 cells/mL in the UK*. HIV Med, 2012. 13(1): p.73-78.



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What were the aims of the study?

Since the introduction of HAART, treatment guidelines have evolved in terms of the recommended CD4 count at which treatment should be initiated. The current BHIVA guidelines recommend that all patients with a CD4 count <350 cells/mL be offered treatment. However, recent audits have shown deviations from guidelines, with 59.7% of patients waiting until a CD4 count <200 cells/mL to start ART. The aim of this study was to determine what factors predict whether patients start or delay ART.

What did the study involve?

All patients who had a CD4 count <350 cells/mm³ between 2004 and 2008 but had not started ART and were still under follow up in 2008 were monitored. Patient characteristics and time until start of ART were looked at to determine what characteristics resulted in rapid or delayed uptake of ART.

What were the results of the study?

- The median time until starting treatment following a CD4 count <350 cells/mL was 0.31 years.
- The median time until starting treatment for this group of individuals decreased from 0.42 years in 2004 to 0.24 in 2008.
 - Of the 4,871 patients monitored, 4,435 (91%) commenced ART.
- Female heterosexuals were 13% more likely to start ART compared to male heterosexuals, whereas injection drug users were only half as likely to start ART as heterosexual men.
 - Those with a high CD4 percentage were less likely to commence ART.
 - Characteristics associated with more rapid uptake of ART were:
 - Previous AIDS diagnosis
 - Older age
 - Follow up to a later calendar year
 - Greater number of CD4 measurements <350 cells/mL
 - Lower CD4 count over follow up
 - More rapidly declining CD4 counts
 - High viral load

What has this study achieved?

This study shows that recommended guidelines are being adhered to well in clinical practice as 91% of people with a CD4 count <350 cells/mL commenced ART and between 2004 and 2008, the time to starting ART for those with CD4 <350 cells/mL decreased. Failure to start ART in good time is associated with increased risk of death and knowing which patient characteristics lead to delayed uptake help us to identify who is most at risk of a poor outcome.

Where can I get more information?

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