Injectable antiretroviral treatment for HIV at Leeds Teaching hospital experience so far

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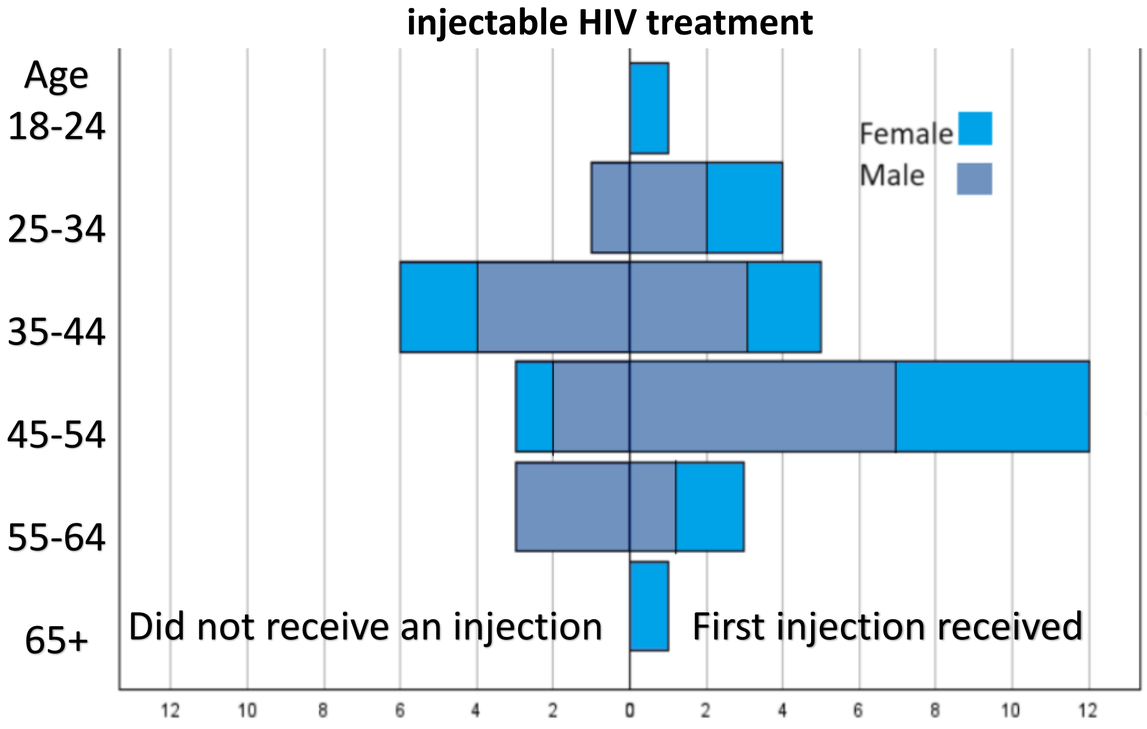
Introduction From April 2022 injectable therapy for people living with HIV became available on the NHS. With the initial roll out BHIVA recommended a cautious approach due to: lack of real-world data, the consequences of virological failure (dual-class resistance) and the requirement to create clinic capacity for twice monthly appointments. Services were to focus on those most in need: expressing major psychological barriers to pill taking, inability to take oral medication, concerning adherence while virally suppressed or describing a risk of stopping oral ART.

We report real-world data from Leeds Teaching Hospitals Trust (LTHT)

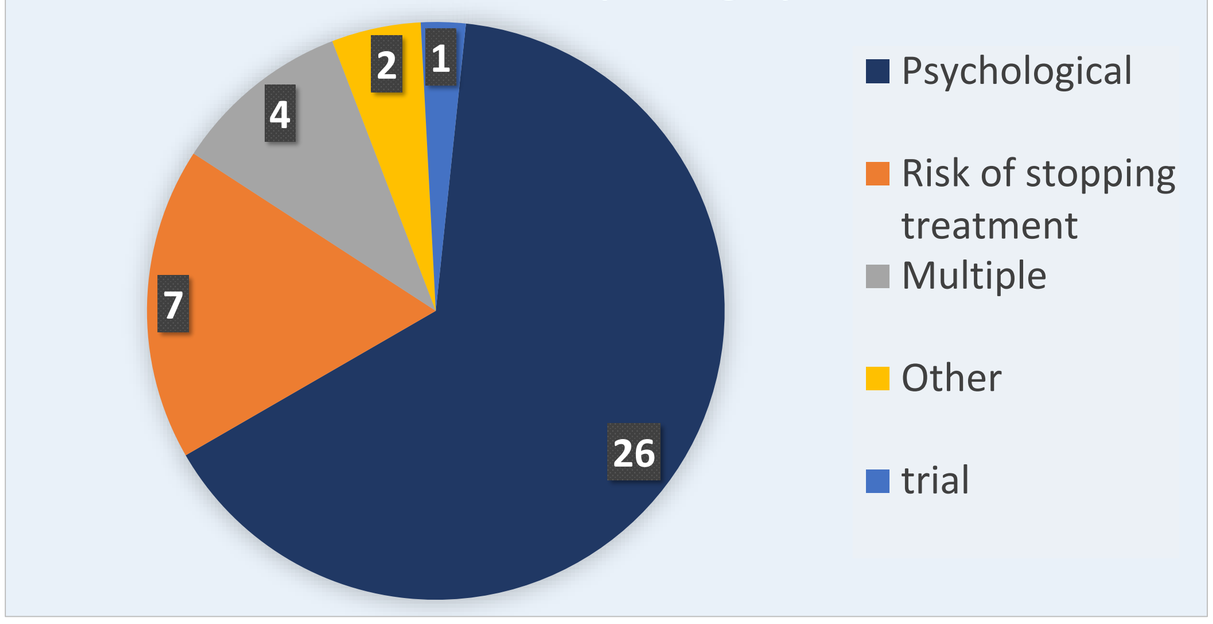
Methods Leeds Teaching Hospitals Trust (LTHT) required all people considered for injectables to be discussed at the HIV Virology MDT to ensure injectables were clinically appropriate and met 'most in need' criteria. We reviewed notes of all people approved to commence injectable therapy from April 2022 to the current time. We report our unit's real-world data.

RESULTS

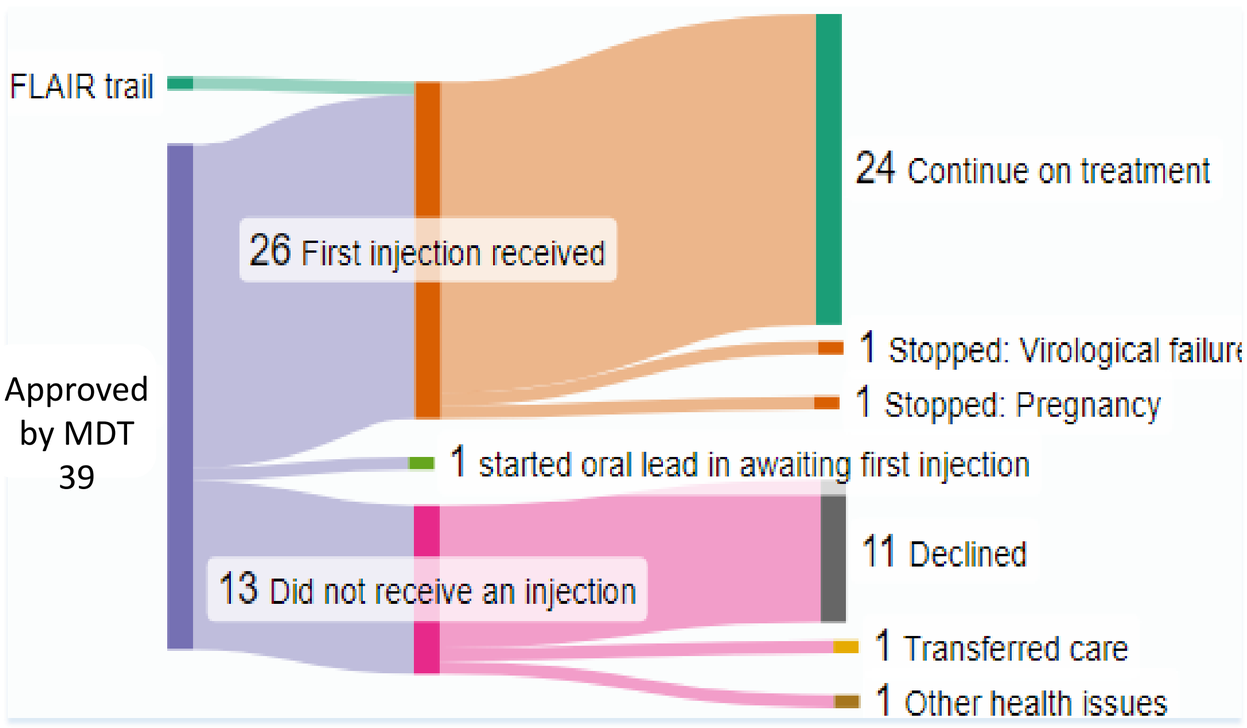
Age and gender distribution of those people approved by MDT for injectable HIV treatment



Reason for requesting injectables



Sankey diagram showing patient approved for injectable treatment

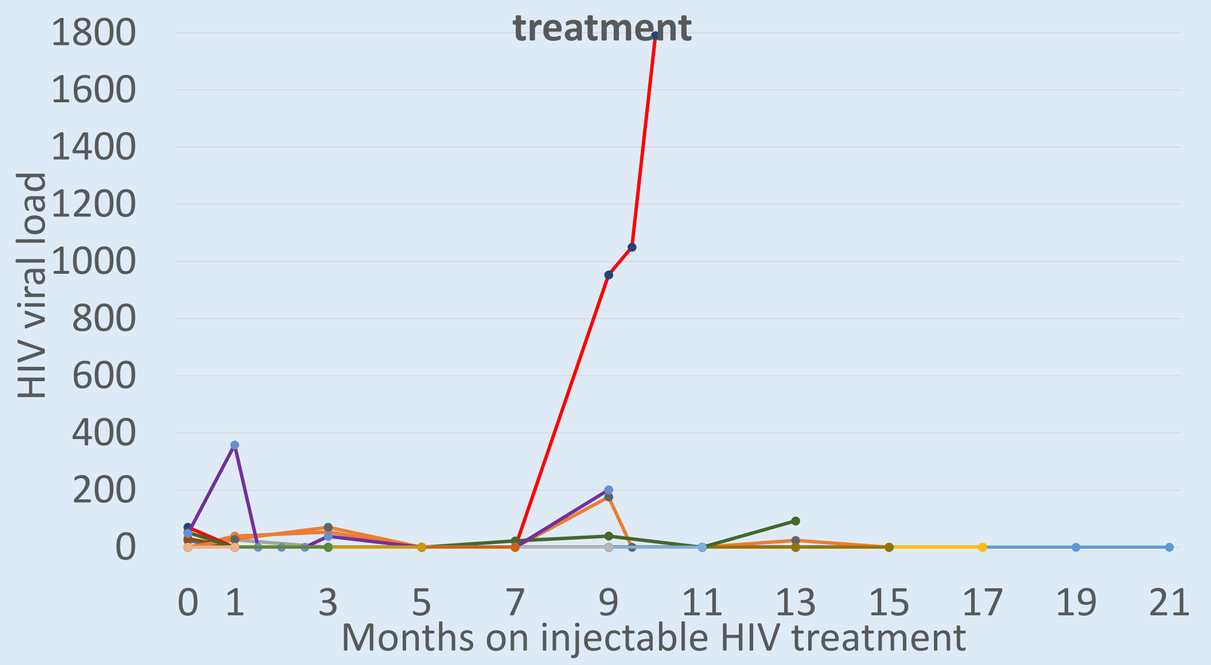


Outcomes. 25 people were administered an initial injection. 1 continued from the FLAIR trial. Of 26 people commenced on injectables the median duration of treatment is 12.95 months (IQR 9.74 – 15.74). The median BMI was 26.60 (IQR 22.09 to 28.75. The most frequent serotypes were B (11) and C(8). 2 people have stopped injectables, 1 due to virological failure and 1 due to pregnancy.

Virological blips Two people experienced virological blips. One person had a viral load of 70 copies/ml at 3 months and 176 copies/ml at 9 months. They have since remained suppressed for 8 months. One person had a viral load of 359 copies/ml at 2 months. This settled for 9 months but rose again to 200 copies/ml this month.

Virological failure One person discontinued due to virological failure. They had received 5 injections. On review they had no predictive reasons for failure. Viral load was 70 copies/ml on completing the oral lead in prior to the first injection. They were virologically suppressed (< 50 copies/ml) until the day of their last injection when their viral load was 953 copies/ml. A repeat sample 2 weeks later was 1,050 copies/ml. A decision was made to switch treatment to Symtuza. A viral load 6 weeks post switch is < 100 copies/ml. Resistance tests on first raised viral load demonstrated acquired mutations: NNRTI E138EK and INSTI GS140GS, Q148QKR, N155NH.

Viral loads for people receiving injectable HIV treatment



Pregnancy One person become pregnant around the time of their 8th injection. The case was discussed at the MDT. Evidence for Long-acting cabotegravir and rilpivirine injectable use in pregnancy is limited. Currently it should only be used during pregnancy when the potential benefits outweigh the risk (3). She was switched to Triumeq prior to when the next dose was due; around 12 weeks gestation. Monitoring continues in the HIV pregnancy MDT. Current viral load 398 copies/ml

Conclusion In our experience injectable therapy has been life transforming for many. However a third approved declined to start and 1/26 commenced developed virological failure with dual class resistance after just 5 injections. Since December and the incidence of virological failure only one patient has been approved for injectable HIV therapy and is currently receiving oral lead in. Someone who was due to start injectable treatment declined as they knew the person who had experienced virological failure.

REFERENCES

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3) Patel P, Ford SL, Baker M, et al. Pregnancy outcomes and pharmacokinetics in pregnant women living with HIV exposed to long-acting cabotegravir and rilpivirine in clinical trials. *HIV Med*. 2023;24(5):568-579. doi:10.1111/hiv.13439
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