Switching to maraviroc in combination with 2 NRTIs: Experience at a large London teaching hospital

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Results (2)

Table 2: Indication for switch to MVC + 2NRTIs

Table 4: 2 NRTI + MVC combinations used

Discussion

Table 6: Indications for discontinuation of regimen

Table 3: Anti-retroviral combinations prior to switch

Results (3)

Table 5: Outcomes of switch to regimen

Limits

Conclusions

References

Switching to maraviroc in combination with 2 NRTIs is non-inferior compared to efavirenz in the MERIT-ES study, but a higher rate of virologic failure was noted in the CCR5-arm.

Maraviroc has relatively few toxicities and may present a useful switch option in patients with CCR5-tropic HIV-1

The use of genotypic viral tropism assays to determine HIV co-receptor tropism using PBMCs for patients with undetectable HIV RNA viral load (VL) could allow use of the CCR5 receptor antagonist maraviroc (MVC) in a switch strategy

We looked at the indications for switch and short term outcomes of using maraviroc in combination with 2 NRTIs as a switch strategy within our large London HIV cohort

Methods

Results (1)

28 patients were switched to maraviroc in combination with 2 NRTIs

Patients switching to maraviroc in combination with 2 NRTIs between 2008 and 2012 were identified using our HIV database

Treatment history and indication for switch were identified using the database and notes based search

Virological outcomes were assessed for those with more than 24 weeks follow up post switch (or failure)

Patients prescribed MVC+2NRTIs as their first ART regimen were excluded from this analysis, results stated as number (percentage), or median [range]

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Table 1: Baseline characteristics

Component

N (%) or median [range]

Table 2: Indication for switch to MVC + 2NRTIs

Indication for switch

N (%)

Dyslipidaemia

6 (28.5)

PIr related

6 (21.4)

Other cause

7 (21.4)

CNS disturbances

6 (17.6)

Efavirenz related

5 (10.7)

Non-Efavirenz ART related

2 (7.1)

GI disturbances

4 (13.2)

PIr related

3 (10.7)

Other cause

1 (3.6)

Other

11 (39.3)

Lipodystrophy

2 (7.1)

Other ART toxicity

7 (25)

Darunavir transaminis

1 (3.6)

Atazanavir renal stone

1 (3.6)

Patient choice

1 (3.6)

Other

4 (13.2)

Not stated

2 (7.2)

Discussion

Outcomes

Total

<24 weeks

Not reached time point

4 (16.7)

Discontinued before time point

3

24-47 weeks

Not reached time point

24 (85.7)

Discontinued prior to time point

3

Discontinued during time point

1

48+ weeks

Not reached time point

18 (64)

Discontinued prior to time point

2

Discontinued after time point

4

VL outcomes

VL<50c/mL at 48wk

20/25 (80)

VL<50c/mL at 24wk

15/20 (75)

Any viral failure

7 (28%)

CD4 change

24 weeks, cells/mm3

+41 [411, 520]

48 weeks, cells/mm3

+91 [380, 679]

Note: This indicates the number of patients who discontinued before time point (table 2).

Patients who switched were predominantly virologically suppressed with good CD4 count experiencing ART related toxicities

Discontinuation was predominantly related to poor adherence, with 50% (3/6) of those who discontinued the regimen having detectable VL at switch to MVC+2NRTI, and subsequently stopping ART

Interpretation of virological efficacy of regimen was limited by retrospective nature of study looking at follow up in clinical practice which is dependent on both patient history and clinician

• One patient with VL<50c/mL at switch had intermittent viraemia but VL<50c/mL at 24 and 48 weeks. Patient subsequently found to have archived M184V, T215Y and L210W mutations which failed to re-emerge on repeat genotypes during viraemia on ABC/3TC/MVC

Revert genotypic tropism demonstrated CCR5-tropic virus

Tropism determination:

93% (26/28) had genotypic tropisms determined on PBMCs, 24/28 with samples with VL<50c/mL, and 2 on samples with VL of 65c/mL and 43c/mL

One patient with DM tropic virus at switch maintained VL<50c/mL on regimen at last FU at 47 wks

8 patients with baseline CCR5-tropic virus had FU tropism testing, all remaining CCR5-tropic with mean duration FU 13 (6, 24) months

Of those who discontinued the regimen (table 6), none had prior detectable resistance mutations, although 66% (4/6) had failed on previous ART regimen, compared to 13.6% (3/22) of those continuing therapy

Limitations

• Retrospective, medical notes-based audit

• Small numbers of patients.

• Relatively short duration of VL/CD4 follow up at inconsistent time points

Conclusions

A switch strategy to maraviroc in combination with 2 NRTIs may be feasible for CCR5 tropic patients with undetectable VL without archived resistance

Viral failure was generally associated with poor adherence

Formal switch studies are needed to assess this strategy in larger populations

References

Heera J et al. MERIT-ES 96 week. IAS 2009, Abstract TUAB103