

Exploring potential interactions between intramuscular cabotegravir (CAB)/rilpivirine (RPV) and methadone: a case report.

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INTRODUCTION

- ART may impact the plasmatic levels of **methadone** in PWH who are receiving methadone treatment.
- Methadone is metabolized by enzymes **CYP2B6** and **CYP3A4**.
- Existing literature indicates that concurrent use of oral RPV and methadone does not affect the maximum concentration, area under the curve (**AUC**), or minimum concentration of RPV, but **reduces the AUC of methadone**, even though no alterations in dosage are necessary when initiating the concurrent use of methadone and RPV.
- Clinical monitoring may be advisable, as methadone maintenance therapy might require **adjustments**.

CASE REPORT

- This is a case of a 64-yo female living with HIV for 39 years, with history of HCV infection and drug addiction under methadone treatment. She has consistently shown low levels of adherence to ART, leading us physicians to propose to the patient a switch from 3TC + DRV/c to long-acting CAB/RPV, which the patient accepted. At the latest follow-up visit prior to the switch she had 930 CD4/mm³ and non detectable HIV-RNA. No genotypic resistance testing was available at time of switch. The first 2 doses were injected in November 2023. Ten days after, the patient began to exhibit **withdrawal symptoms**, prompting her to seek assistance from **Addiction Services (AS)**. She reported absence of such symptoms in recent years, indicating that they had been completely controlled with 60 mg/day of methadone. This crisis was managed by **increasing the dosage** to 80 mg/day. Suspecting a potential interaction, a switch to oral therapy was performed to TAF/FTC/BIC. Over the following weeks, in accordance with her AS, the patient managed to reduce the daily dosage of methadone to 60 mg/day. After 4 weeks, she again reported adherence issues, expressing a desire to return to intramuscular therapy. A new administration of CAB/RPV was performed in March 2024, resulting in the recurrence of withdrawal symptoms, necessitating the patient to seek assistance from AS. Currently, the patient is again tapering off the methadone dosage, in anticipation of transitioning back to oral therapy.

CONCLUSIONS

- PWID are generally individuals with **adherence issues** to antiretroviral therapy, where long-acting therapy can certainly be helpful.
- However, further studies are needed regarding the **potential interaction** between methadone and ART

