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RESEARCH NEWS

Long term antiretroviral injection proves effective in trial

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Paris

A long acting injection for HIV could transform antiretroviral therapy (ART) for patients who struggle to take a daily pill, a leading doctor has said, after the first study of a fully injectable antiretroviral regimen found it to be effective.

Research presented at the International AIDS Society's Conference on HIV Science in Paris, France, showed that a four or eight week maintenance ART injection of cabotegravir plus rilpivirine had high rates of virologic response and was well tolerated through 96 weeks.

At the end of a two year trial of 286 people, 94% of patients who had received the eight week injection and 87% of those who had the four week injection had the virus under control, defined as having fewer than 50 copies of the virus per millilitre of blood. This compared with 84% of patients who continued with oral treatment.

Patients were recruited from the US and Europe and were virologically suppressed with oral treatment for 20 weeks.

The study has moved into phase III registration trials with the aim of the monthly injection, rather than the eight week injection, being approved when the trials are completed next year. The injection, which had extremely high patient satisfaction, is intramuscular and must be administered in a healthcare setting.

Joseph Eron, professor of medicine at the University of North Carolina, USA, and lead author of the study, told *The BMJ* that, despite "terrific" oral treatments for HIV, the injection had the potential to reach patients who struggle to take a pill each day.

"People with chaotic lives, people who have difficulty with adherence, and people with substance misuse or mental health illness may be able to take advantage of this long acting therapy," said Eron, adding that it could also be hugely beneficial for adolescents.

"A lot of people who were in the study appreciated not having to take a pill every day. Not only because you have to remember it and you might forget but [because] patients feel kind of free from that daily reminder that they have HIV," he said.

Linda-Gail Bekker, deputy director of the Desmond Tutu HIV Centre in Cape Town, South Africa, said that new treatment options would "bring us a step closer to seeing the end of this epidemic."

In other news from the Paris conference:

- Swaziland, which has the highest HIV prevalence in the world, has reduced its rate of new HIV infections in adults aged 18-49, down from 2.5% in 2011 to 1.4% in 2016 (2.0% in women and 0.9% in men). The percentage of people taking treatment rose from 37% to 74% over the same time frame. A total of 220 000 people in Swaziland have HIV—a 28.8% adult prevalence.
- The World Health Organization released new guidelines for implementation of pre-exposure prophylaxis (PrEP)[1] and for the management of advanced HIV disease and rapid initiation of ART.[2] The guidance recommends that clinicians should screen potential PrEP users by asking questions framed in terms of people's behaviour—but not in a way that is seen as "rationing PrEP or excluding people from PrEP services." It also advises that a person starting PrEP should have an HIV test every three months. To support adherence, providers should emphasise that PrEP is highly effective if taken as prescribed, which can be helped by making it a daily habit linked to something else that patients do every day.

The guidelines add that rapid ART initiation should be offered to all people with HIV after a confirmed diagnosis and should be offered on the same day to people who are ready to start treatment.[1]

1 World Health Organization. WHO implementation tool for pre-exposure prophylaxis (PrEP) of HIV infection clinical—module 1: clinical. July 2017. http://apps.who.int/iris/bitstream/10665/255889/1/WHO-HIV-2017.17-eng.pdf?ua=1.
2 World Health Organization. Guidelines for managing advanced HIV disease and rapid initiation of antiretroviral therapy. July 2017. http://apps.who.int/iris/bitstream/10665/255884/1/9789241550062-eng.pdf?ua=1.