

When double dosing is appropriate: Use of the two-injection start protocol for aripiprazole depot

Isabelle Wu, Greg Spann, Caroline Chiu¹

¹Logan Hospital Pharmacy Department, Queensland Health

Background

The two-injection start protocol for aripiprazole depot is currently unlicensed in Australia, but UK guidelines¹ and available published evidence, of which there is a paucity, support the safety and efficacy of this regimen^{2,3,4}. This case report adds to the Australian and global experience.

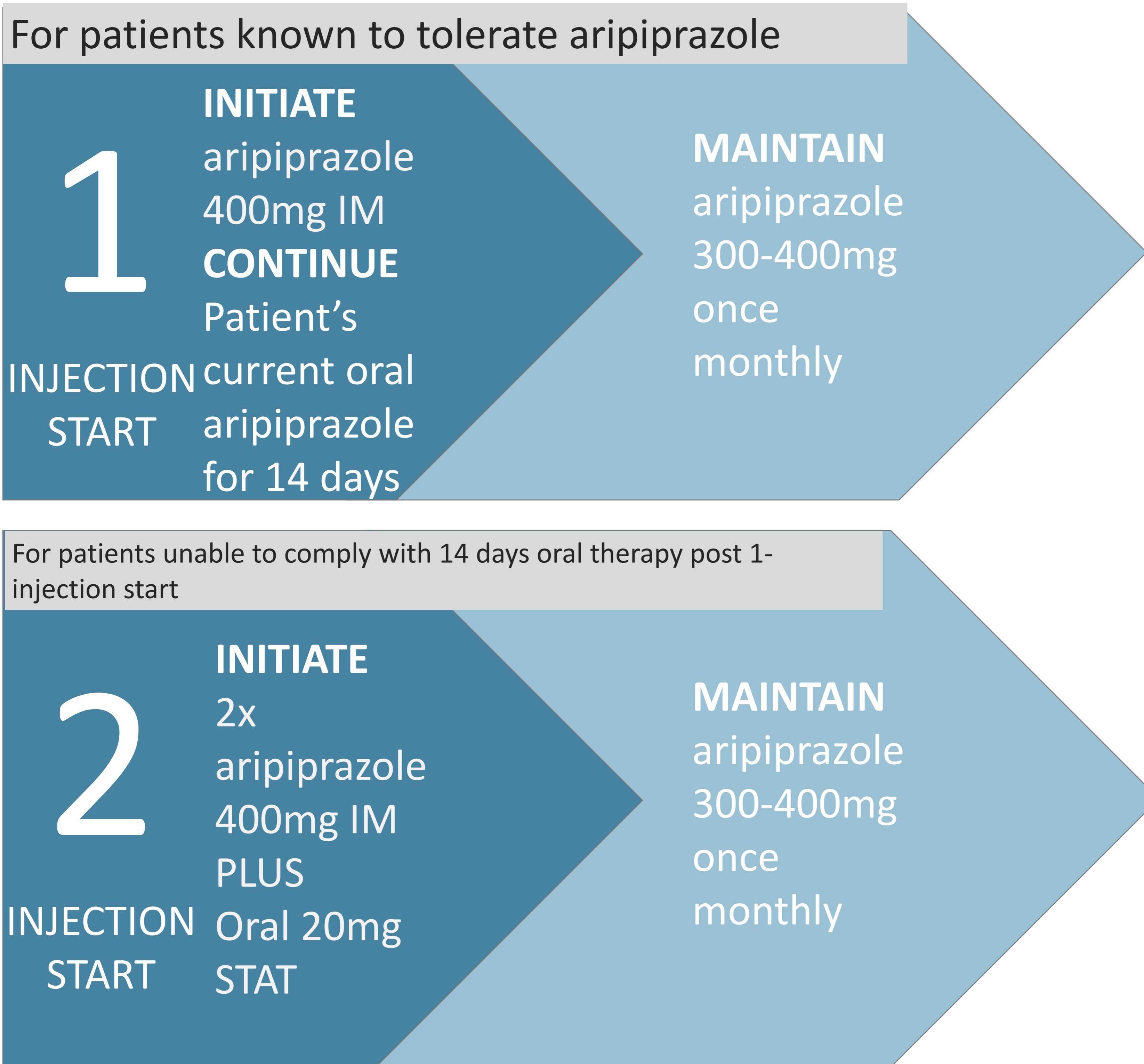


Figure 1: Two protocols for commencing aripiprazole depot

Pharmacist Interventions & Outcomes

- The pharmacist supported the psychiatrist in involving the consumer in shared decision making when recommending the two-injection start regimen, as it is currently unlicensed within Australia.
- Both aripiprazole LAIs were administered and well tolerated in hospital, with no evidence of akathisia or other side effects.
- Counselling was provided to the consumer regarding potential side effects of high dose aripiprazole.
- The consumer was discharged 4 days following administration and was referred to pharmacists working in the community team for follow up with specific regards to safety and tolerability.
- No adverse reactions were reported 4 weeks post-discharge.

References

1. Taylor D, Barnes T, Young A (2021), *The Maudsley Prescribing Guidelines*. West Sussex, UK
2. Otsuka Pharmaceuticals (UK) Ltd. Summary of Product Characteristics. Abilify Maintena 400 mg powder and solvent for prolonged-release suspension for injection. 2020; <https://www.medicines.org.uk/emc/product/7965/smpc>.
3. Salvi V, et al, 2022, 'Aripiprazole LAI two-injection start in a 16 year-old adolescent with schizophrenia', *Neuropsychopharmacol* vol. 42, no. 2, pp.2 10-23
4. Wang Y, et al, 2022, 'An alternative start regimen with aripiprazole once-monthly in patients with schizophrenia: population pharmacokinetic analysis of a single-day, two-injection start with gluteal and/or deltoid intramuscular injection', *Curr Med Res Opin*, vol. 37 no. 11, pp. 1961-1972.

Patient presentation

- A 25-year-old female was admitted to a psychiatric unit following non-adherence to clozapine.
- The consumer had a previous diagnosis of schizophrenia and known chronic methamphetamine use.
- With prior history of response to aripiprazole long-acting injection (LAI), conversion to this agent was desired.
- Poor insight placed the consumer at high risk of relapse from non-adherence to the 14 days of oral aripiprazole therapy required following commencement of aripiprazole LAI using the conventional one-injection start regimen.
- Two-injection start was proposed: two 400mg aripiprazole LAIs in separate muscles along with a single 20mg dose of oral aripiprazole (figure 2).

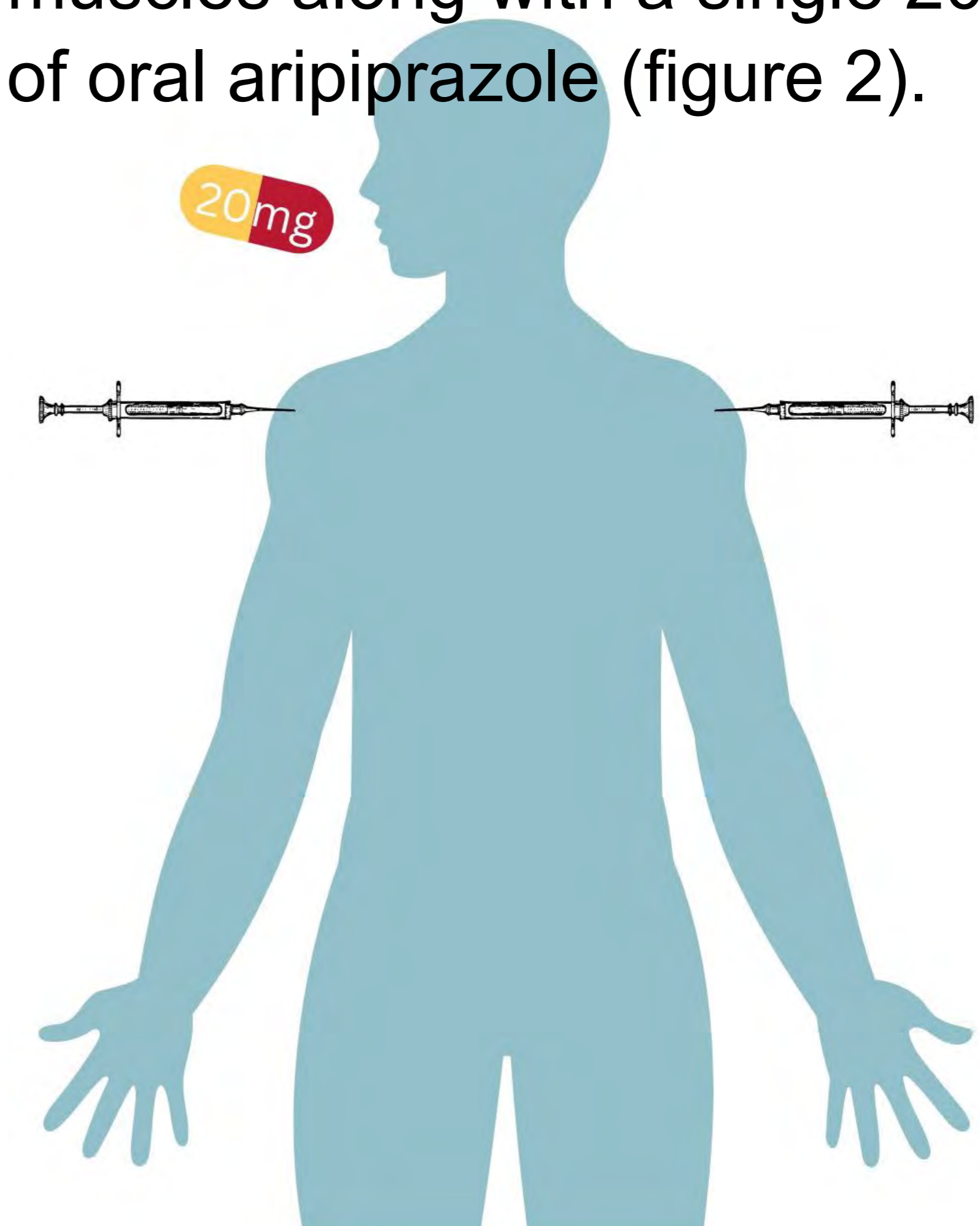


Figure 2: Administration of aripiprazole 2-injection protocol i.e. into different deltoid/ gluteal muscles

Recommendations

This case report adds to the experience of the two-injection protocol in clinical practice for consumers who are unable or unlikely to adhere to oral aripiprazole therapy. However, more robust studies and case series are needed to demonstrate the safety and efficacy of this protocol.