AMERICAN ASSOCIATION OF COMMUNITY PSYCHIATRISTS

CLINICAL TIPS SERIES

The Clinical Tips Series provides practical guides for common clinical challenges, specifically adapted to the needs and concerns of community psychiatrists.

LONG ACTING ANTIPSYCHOTIC MEDICATIONS

AACP Recommendation: We recognize that long acting antipsychotic medications (LAAs) may have a significant contribution to improving outcomes for individuals with psychotic illnesses. Nevertheless, they are currently underutilized in community psychiatry settings. Therefore, AACP recommends that community psychiatrists and behavioral health organizations take steps to increase use of LAAs

AACP endorses the following steps to increase access to LAAs.

1) **Expanded Indications:**
   The AACP recommends expanding the scope of indications for LAAs *well beyond* the single indication of antipsychotic nonadherence. LAAs may be extremely helpful to many individuals in facilitating a more convenient way to take medications and/or better addressing a variety of clinical and social challenges.

   The following factors may lead psychiatrists to consider offering LAAs:
   - **Personal preference of the person receiving care (or sometimes, of family or other key natural supports);**
   - **Past history of positive response to LAAs;**
   - **Past history of non-adherence to oral medications;**
   - **Homelessness;**
   - **Criminal Justice involvement (to demonstrate or promote adherence);**
   - **Frequent utilization of ED and/or hospital;**
   - **Co-occurring substance use disorder;**
   - **Cognitive challenges;**
   - **Anosognosia** or **limited insight;**
   - **Facilitating a smooth transition to clozapine**.

2) **Recovery-Oriented, Trauma-informed, Shared Decision-Making:**
   LAAs should be presented within the conceptual framework of "recovery-oriented care." Individuals with mental health challenges should be empowered with the option to *choose* LAAs as a resource to help them work towards their own recovery goals. The personal benefits of using LAAs can be ethically balanced with the perceived challenges of receiving injections and the possible association of lack of personal control of their health needs.

This challenge arises because unlike oral medications, LAAs are *administered to* an individual by a clinician; they cause physical pain and they involve direct contact and skin exposure. Given these factors, individuals may experience their role as passive and LAAs as coercive.

The experience of passivity and perception of coercion are often avoidable, however, especially if the clinician employs shared decision making (SDM) and/or motivational interviewing (MI) when discussing LAAs. The psychiatric provider must work diligently to use SDM early in - and throughout --the course of - care so the person makes meaningful treatment decisions and the clinician is experienced as a recovery partner. SDM may include offering different approaches such as oral antipsychotic medications, psychosocial treatment only, or LAAs when clinically indicated. The use of an SDM approach often strengthens the therapeutic alliance so individuals can feel more empowered to make decisions about their care. When sensitively guided by the clinician, this process provides an important foundation for people to make self-directed medication decisions about LAAs. Motivational engagement strategies (e.g., MI) may be implemented when the clinician identifies clear benefits of LAAs and the person is not yet ready to accept a trial of LAA. Moreover, if there is an involved family, it is important to include the family in constructively assisting the person receiving treatment with decision- making regarding LAAs in pursuit of overall recovery goals. Although individuals might decline LAAs for months to years, assertive MI and SDM are often effective in evoking and increasing the person's motivation over time. Therefore, SDM and MI approaches minimize coercive experiences for people receiving LAAs.

LAAs may minimize distress for individuals with limited insight. Individuals with limited insight may regularly struggle with the decision of whether or not to take antipsychotic medications because they believe they do not have a mental illness requiring medication. Making the decision to take an antipsychotic medication can be a daily stressor for such individuals, even though they may simultaneously believe – for multiple reasons – that taking the medication may be an aid to attain personal goals. For example, a person may associate taking antipsychotic medications with better work abilities while also believing there is no medical reason to take an antipsychotic. This individual would experience once or twice a day the challenge of making the decision to take an oral antipsychotic medication. With LAAs, this decision needs to be made much less frequently. Furthermore, many individuals with limited insight may experience each act of taking antipsychotic medications as negative, reinforcing the belief that their experience is mislabeled or not fully understood by their behavioral health workers. For such individuals, the option of taking an LAA every few weeks or months removes the repetitive daily reminder of this perceived misdiagnosis, thereby strengthening both the individual's self-esteem and his or her treatment engagement.

3) Apply these Clinical Pearls:

- **Do it yourself!** Community psychiatric providers can improve access to LAAs by developing the capacity to administer LAAs themselves. Many individuals may be more motivated to accept LAAs when administered directly by psychiatric providers with whom they have established a positive, working alliance.
- **Educate your team.** Psychiatric providers can educate consumers, clinical team members, and families about the value of LAAs, and the best approach to using them.
- **Plan ahead.** Initiate discussion of the LAA option early in treatment. Consider a possible long term LAA transition plan at the time of initiating oral medications.
- **Use careful language:** DO NOT refer to LAAs as "the IM" or "the needle." Individuals may associate this with previous experience of short-acting, injectable medications administered in coercive situations. Support team members in using alternative terms.

- **Be trauma-informed:** Be aware that individuals with trauma history and/or coercive IM medication history may be at risk of trauma related symptoms triggered by LAA administration or discussion. Highlight that there is choice and preference for LAAs where there may have been little choice involved in IM medications for agitation.
- **Start low and go slow:** It is often better to err on the side of under-dosing the LAA at the beginning, rather than risk prolonged side effects that leads the person to refuse further LAA administrations.
- **Transition with oral meds:** Remember to continue oral medications during the initiation period of LAAs when clinically indicated, and allow for flexible dosage adjustment to compensate for initial over- or under-dosing.
- **Maintain necessary oral anti-extrapyramidal syndrome (EPS) medication** (e.g., anticholinergic medications or amantadine): Individuals prescribed oral antipsychotic and anti-EPS medications who initiate LAAs may be at risk for EPS due to nonadherence of oral anti-EPS medications. Educate persons receiving LAAs about the importance of taking anti-EPS medications even if they are not taking oral antipsychotic medications.
- **Attempt tapers of anti-EPS medications:** Individuals may require lower anti-EPS dosing than with oral medication after transition to an LAA. Attempted tapers of such medications should be considered over time.
- **Check plasma levels for non-responders:** For those who are experiencing a suboptimal response, consider checking plasma levels of antipsychotic medications. This is advantageous when therapeutic ranges are known (e.g. haloperidol) and to identify rapid metabolizers (e.g., of fluphenazine, risperidone or paliperidone) which can lead to better results after adjusting dosage and/or interval accordingly.
- **Anticipate benefits from more consistent plasma levels:** Individuals at risk of antipsychotic discontinuation syndrome due to abrupt cessation of oral antipsychotics often experience clinical benefits from LAA.
- **Use dosage conversion tables:** These are provided below.
- **Implement a trial of the oral antipsychotic medication before initiating the LAA version, in order to identify severe adverse reactions, response, dosing and/or ability to tolerate the agent.**

4) <u>Pursue Administrative and Operational Supports:</u>

- Train providers in proper administration techniques. Review Z-Track technique, needle stick safety, proper anatomical locations, and aseptic administration.
- Identify a safe, private space for medication administration. Develop a system for sharps and hazardous waste disposal.
- Ensure supplies: safety/retracting needles, gauze, alcohol, band-aids, and gloves
- Arrange for refrigeration if Risperdal Consta is to be utilized.
- Create a formal procedure for LAA orders to be communicated if the non-prescribing clinician or more than one clinician may be administering LAAs. Update orders through an electronic health record when feasible.
- Create or update a blood borne pathogen exposure policy in case of needlestick.
- Provide LAA reminder cards to individuals upon administration so they know – and can track – their last LAA date and next LAA date. This minimizes the risk of early or redundant LAA administration by another provider and often increases individuals' participation in the LAA process.

SEE TABLE BELOW *for Selected Long Acting Antipsychotic Medications for Community Psychiatry …*

Table: Selected Long Acting Antipsychotic Medications for Community Psychiatry

Medication Name	Typical maintenance, administration interval: Time to peak level:	Loading or initiation dosing	Oral medication supplementation indicated at the initiation of LAA	Medication-specific benefits	Medication-specific disadvantages	Strategies with delayed / missed dosing
haloperidol decanoate	Administration Interval: q4 weeks Peak blood levels post injection: 5-7 days	Day 1: 50mg. Day 8: (Monthly Dose – 50mg) Monthly Dose=Total oral Daily Dose x 10. Initiate q4 week interval from day 8.	Yes. Optimally, at least 6 weeks (duration recommended based on clinical experience of authors.) May taper oral dose earlier and more rapidly if EPS or other side effects.	Q4 wk. dosing, lower cost, lower metabolic risk, clear oral dose conversion. Less metabolic syndrome risk than second generation antipsychotics. Lower cost.	Risk of: TD, EPS, NMS and prolactinemia. Individuals may associate this med with haloperidol HCl IM experience, risk of neuroleptic Induced Negative Syndrome. May require anti-EPS rx.	
Fluphenazine decanoate	Administration Interval: q2-3 wks. Peak blood levels after injection: 2-5 days	Day 1 Oral dose x 1.25. Alternatively, may initiate 25mg IM q2 weeks and titrate/taper based on treatment response and tolerability.	Yes. Optimally for 3-5 weeks.	Can more rapidly titrate or taper due to shorter half life, short onset to peak plasma levels (2-5 days), lower cost. Less metabolic syndrome risk than second generation agents. Lower cost.	Q2 weeks, Risk of: TD, EPS, NMS and prolactinemia. May require anti-EPS medications.	.
paliperidone palmitate (Sustenna)	Administration Interval: q4 weeks Peak blood levels after injection: 2 weeks	Day 1: 234mg IM Day 8: 156mg IM Then q4 wks. maintenance dose from day 8.	Not necessary to oral dose during initiation.	No oral dose supplementation is needed after loading doses, q4 week interval,	Risk of: prolactinemia, metabolic syndrome, DM2, dyslipidemia, obesity, HTN, EPS/TD risk. High cost.	If > 6 weeks delayed for maint dose, administer maint dose on day 1 and 8. Exception: if maint dose 234mg follow package insert. If > 6 months delayed, reload according to package insert.
Paliperidone palmitate (Trinza)	Administration Interval: q12 wks. Peak blood levels after injection: 4-5 weeks	Transition only from paliperidone palmitate [Sustenna] (stable dose for 4 months) Sustenna to Trinza Conversion: mg: 78=234 mg:117=410 mg:156=546 mg:234=819	Not Applicable (transitioned from Sustenna LAA)	q12 weeks	Slow to taper or titrate if suboptimal dose or symptom exacerbation. Risk of: prolactinemia, metabolic syndrome, DM2, dyslipidemia, obesity, HTN, EPS/TD risk. High cost.	If delayed >3.5 -4 months, administer last dose of Trinza. If miss 4-9 months, use re-initiation regimen with Sustenna as per package insert. If > 9 months, reload with Sustenna and follow insert.

Medication Name	Typical maintenance, administration interval: Time to peak level:	Loading or initiation dosing	Oral medication supplementation indicated at the initiation of LAA	Medication-specific benefits	Medication-specific disadvantages	Strategies with delayed / missed dosing
Aripiprazole (Maintena)	Administration Interval: q4 week Peak blood levels after injection: 5-7 days	400mg then q 4 weeks. 300mg dose if slow metabolizer CYP2D6.	Yes. 1st 2 weeks	Very low risk of prolactinemia, less metabolic risk than other second generation antipsychotics, but more than first generation agents.	Fixed dosing with low dose flexibility. Risk: akathisia, metabolic syndrome, DM2, dyslipidemia, obesity, HTN, high cost, EPS/TD	for 2nd or 3rd Injection: >5 weeks delayed, reload and oral supplement x2 weeks. If 4th dose or thereafter, >6 weeks delayed, reload and oral supplement x2 weeks.
Aripiprazole (Aristada) Lauroxil	Administration Intervals: q4 weeks, q6 weeks or q8 week dosing Peak blood levels after injection: 3-5 days	Dosing and oral dose equivalents: 1064mg q8 weeks=Abilify 15mg PO daily 882mg q6 weeks =Abilify 15mg po daily 882mg IM q4 weeks ≥ Abilify 20mg po daily 662mg IM q4 weeks=Abilify 15mg po daily 441mg q4 weeks=Abilify 10mg PO daily	Yes. 1st 3 weeks.	Low risk of prolactinemia, less metabolic risk than other second generation agents, but more than first generation, aripiprazole preparation with dose adjustment options (vs. Maintena) and dosing interval flexibility.	Risk: akathisia, metabolic syndrome, DM2, dyslipidemia, obesity, HTN, high cost, EPS/TD	For q8 wk. dosing: Delayed 10-12 wks. from last injection, supplement with oral meds for 7 days. If >12 weeks since last injection, reload dose and oral supplement. For 882mg or 662 mg dosing: if 8-12 weeks since last dose, oral supplement for 7 days. If missed >12 weeks, reload. For 441mg dosing, see package insert.
Risperidone LAA "Consta"	Administration interval: q2 wks. Peak level after injection: 3 weeks	Oral dose conversion oral risperidone to Consta: mg: ≤3 =25 mg: >3-5 = 37.5 mg mg: >5=50 >8mg=N/A	Yes. At least 5 weeks recommended after initiation per author's experience. Manufacturer recommends briefer duration.	Less EPS/TD/NMS/ antipsychotic induced negative syndrome risk than first generation agents.	q2 wks., low therapeutic ceiling vs. Sustenna, high risk of prolactinemia, metabolic risk, EPS. Must refrigerate. High cost (varies by state formulary).	If missed dose during maintenance for more than 2 weeks, consider oral supplement 6 weeks after restarted injection for duration of missed dose.
Note: Authors have no clinical experience with olanzapine Relprevv. Use in the community is limited low due to the risk of post injection delirium/ sedation syndrome, required 3-hour monitoring after administration and administration location of a registered healthcare facility with ready access to emergency services.						
TD: tardive dyskinesia, EPS: extrapyramidal signs/symptoms, NMS: neuroleptic malignant syndrome						
Prescribing providers must check package inserts, review scientific literature and consult guidelines while prescribing. Content from this table consists of clinician experience and consensus.						

References

- Beyea SC, Nicholl LH, 1995, Administration of medications via the intra-muscular route: an integrative review of the literature and research based protocol for the procedure, *Applied Nursing Research*, Vol 8 No 1, p22-33
- Day J et al, 1995, A self rating scale for measuring neuroleptic side effects, *British Journal of Psychiatry*, 166, p650-653.
- Donaldson C, Green J, 2005, Using the ventro-gluteal site for intra-muscular injections*, Nursing Times,* 101:16, p36-38
- Greenaway K, Using the ventro gluteal site for intra muscular injection, *Nursing Standard*, Vol 18, No 25 p 39-42
- Nisbet AC, 2006, Intra muscular gluteal injections in the increasingly obese population: retrospective study, *British Medical Journal*, 332, p637-638.
- Roger MA, King L, 2000, Drawing up and administering intramuscular injections: a review of the literature, *Journal of Advanced Nursing*, 31(3) p 574-582.
- Walker H, MacAulay K, 2005, Assessment of the side effects of antipsychotic medication*, Nursing Standard*, Vol 19, 40, p 41-46
- Wistedt B, 1995, How does the psychiatric patient feel about depot treatment, compulsion or help*? Nord Journal of Psychiatry* Vol 49, suppl 35, p41-46
- Workman, B, 1999, Safe injection techniques, *Nursing Standard*, Vol 13, 39, p47-53
- Zaybak AG et al, 2007, Does obesity prevent the needle form reaching the muscle in intramuscular injections?, *Journal of Advanced Nursing*, Vol 58/6 (552)
- Cambridgeshire and Peterborough Mental Health NHS Trust, 2006, *Guidelines for Administration Through Intra Muscular Injections.*
- Sajatovic M et al, 2013, Prospective trial of customized adherence enhancement plus long acting injectable antipsychotic medications in homeless or recently homeless individuals. *Journal of Clinical Psychiatry*, Vol 74, No. 12. 1249-1255.
- Havering Primary Care Trust, 2006, *Clinical Guideline for the Administration of Anti Psychotic Depot Injections for Adults*.
- Wilson W. 2004. A visual guide to expected blood levels of long acting injectable risperidone in clinical practice. *Journal of Psychiatric Practice.* Vol 10, No. 6. 393-402.

- The other approach: the most compelling concerns with all this are, broadly speaking, ethics in the context of recovery-orientation. Those challenges could simply be acknowledged as an edit to what we have drafted, being clear that the Tip is by definition a practical guide and that the clinician needs to be highly sensitive to the ramifications of using these agents.

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