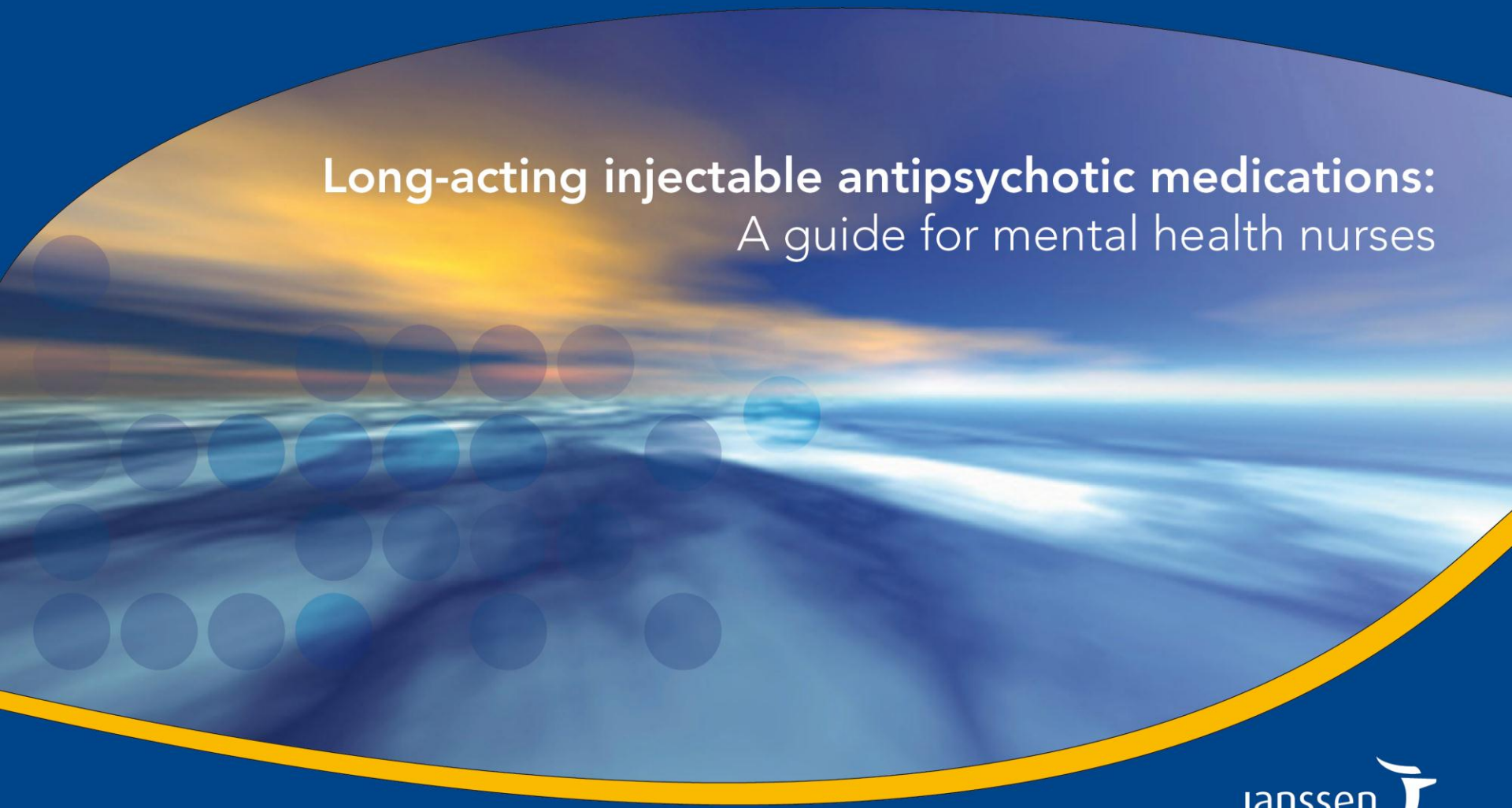
PSYCHIATRY ACADEMY

Long-acting injectable antipsychotic medications:
A guide for mental health nurses



Janssen
PHARMACEUTICAL COMPANIES
of Johnson & Johnson

What this presentation covers

- The role of long-acting injectable (LAI) antipsychotic agents in the treatment of schizophrenia today
- Engaging consumers to encourage their understanding and acceptance of LAIs
- Some common preconceptions and assumptions about LAIs
- Tips and techniques for injections

The role of LAI antipsychotics in the management of schizophrenia

Currently available LAI antipsychotics

Drug name (trade name)	Vehicle	Antipsychotic group	Administration site	Usual maintenance dosing interval (weeks)
Fluphenazine decanoate (Modecate)[1,2]	Sesame oil	Phenothiazine	Any large muscle site	4–6
Flupenthixol decanoate (Fluanxol)[3]	Coconut oil	Thioxanthene	Gluteus maximus	2–4
Haloperidol decanoate (Haldol)[4,5]	Sesame oil	Butyrophenone	Gluteal region	4
Zuclopenthixol decanoate (Clopixol)[6,7]	Coconut oil	Thioxanthene	Any large muscle site	2–4
Risperidone LAI (Risperdal Consta)[8]	Aqueous suspension	Serotonin/dopamine antagonist	Deltoid or gluteal regions	2
Olanzapine (Zyprexa Relprevv)[9]	Aqueous suspension	Diazepine	Gluteal region	2–4
Paliperidone palmitate (Invega Sustenna)[10]	Aqueous suspension	Serotonin/dopamine antagonist	Initiate in deltoid muscle, subsequent doses in deltoid or gluteal muscle	4

1. Modecate PI. **2.** Modecate CMI. **3.** Fluanxol PI. **4.** Haldol PI. **5.** NCBI 2010. **6.** Clopixol PI. **7.** Clopixol CMI. **8.** Risperdal Consta PI. **9.** Zyprexa Relprevv PI. **10.** Invega Sustenna PI.

Benefits/disadvantages of LAIs compared with oral medications

Benefits	Disadvantages
• Improved adherence and relapse prevention[1,2]	• Possible increased risk of extrapyramidal side effects with typical agents[1]
• Easy detection of non-adherence[1,2]	• More invasive delivery[1]
• May improve consumer outcomes[1,3–5]	• Slow to titrate if side effects occur[7]
• More consistent drug delivery[1]	
• Lowest effective dose is more safely achieved[1]	
• Reduced risk of overdose[1]	
• Convenience[6]	

1. Patel et al. 2005. **2.** Citrome 2009. **3.** Adams et al. 2001.
4. Tiihonen et al. 2006. **5.** Emsley et al. 2008. **6.** Roberts et al. 2004. **7.** Barnes 2005.

Improved adherence to antipsychotic medication may improve outcomes

- Medication non-adherence rates range from 4% to 72% in studies[1]
- Mean non-adherence rate = 49.5% using strict criteria for adherence[1]
- Research suggests that psychiatrists underestimate medication non-adherence rates among consumers[2]
- Research also suggests that poor adherence is strongly associated with relapse[3]
  - Odds ratio for psychotic relapse = 10.27
  - Odds ratio for hospitalisation = 4.00

1. Lacro et al. 2002. **2.** Remington et al. 2007. **3.** Morken et al. 2008.

Consequences of relapse[1]

- Potential danger to self or others
- Family burden and estrangement
- Cost of care (emergency department, hospitalisation, more frequent out-patient visits)
- Loss of functional achievements
- Loss of self-esteem
- Illness might become more resistant to treatment
- Harder to re-establish previous gains
- Potential neurobiological sequelae

1. Kane 2007.

RANZCP clinical guidelines

- Depot medications (including LAIs) are for those who opt for them voluntarily through preference, or for consumers who do not adhere to oral medications (even after comprehensive psychosocial intervention) and who have frequent relapses as a result[1]
- Atypical injectable agents are preferred because of better tolerability and reduced risk of tardive dyskinesia[1]
- It is recommended that LAIs only be prescribed after tolerability is established via an oral trial of the medication[2,3]

1. RANZCP 2005. **2.** Risperdal Consta PI. **3.** Zyprexa Relprevv PI.

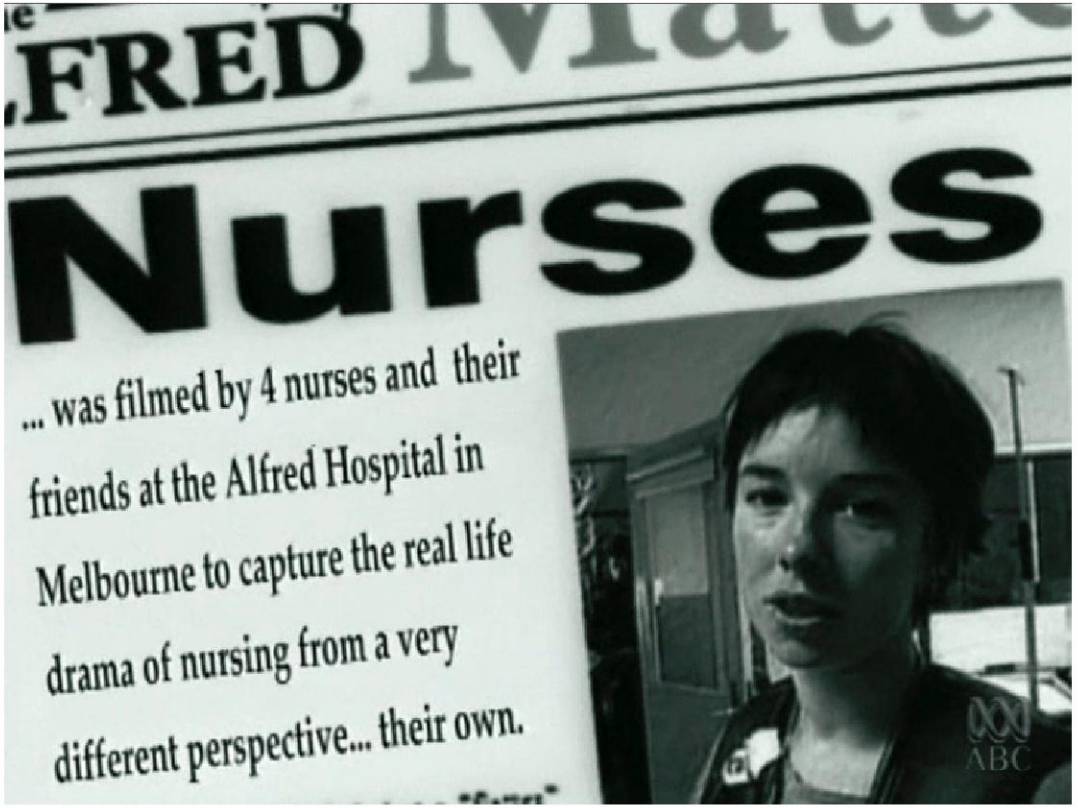
Engaging consumers

What consumers want from the nurse–consumer relationship

- In a small UK study, participants at a depot clinic said that nurses were reliable, honest and trustworthy, informative and more relatable or approachable than psychiatrists[1]
- The nurse–consumer relationship went beyond the act of giving the injection[1]
- In a US survey of 100 psychiatric in-patients, nursing actions that communicated trustworthiness, competence, emotional support and empathy were rated by consumers as being the most helpful[2]
- These qualities can be communicated even in the short time mental health nurses (MHNs) spend with consumers during the administration of a depot injection[1]

1. Phillips et al. 2007. **2.** Richmond et al. 1995.

Nurse–consumer interaction



Discuss the strategies you use to engage consumers during the injection process

Managing consumer perceptions and experience, and nurturing motivation

- MHNs are adept at using their clinical judgement and consumer knowledge to guide their approach to consumer engagement
- Depending on the context of your situation, here are some strategies you may find helpful:
  - Maintain a positive feeling within the administration setting[1]
  - Explain in detail how the injection will be administered[1]
  - Identify and address any negative feelings about the injections[1]
  - Discuss fears about pain[1]
  - Invite feedback on the injection experience[1]
  - Be proactive in asking about problems with side effects, difficulties getting to injection appointments, fears about the therapy etc.[1]

1. Adapted from Lasser et al. 2009.

Challenging assumptions about LAI medications

Assumption #1

Injectable agents are only to be used as a last resort for consumers who are non-adherent[1]

- Depot agents have numerous advantages that may make them a preferred choice over oral agents[1]
- Some consumers say that they have 'more normal lives' while on depot medication[2]
- Atypical antipsychotic depot agents are effective and well tolerated in a range of consumer groups[3–7]

1. Patel et al. 2005. **2.** Svedberg et al. 2003. **3.** Lasser et al. 2004.
4. Singh et al. 2009. **5.** Macfadden et al. 2010. **6.** Emsley et al. 2008. **7.** Keith et al. 2004.

Assumption #2

Depot agents are old-fashioned, stigmatising and coercive

However…

- New atypical antipsychotic depot agents are now available[1]
- Studies show consumers on depot sometimes prefer it to an oral drug[1,2]
- Consumer autonomy is perceived to be greater (by consumers and nursing staff alike) in a setting where there is openness to questions, awareness of consumer views, attentiveness to the consumer as a whole person and continuity of care[3–5]

1. Patel et al. 2005. **2.** Patel et al. 2009. **3.** Roberts et al. 2004. **4.** Svedberg et al. 2000. **5.** Svedberg et al. 2001.

Assumption #3

All depot injections are very painful

However…

- Use of best-practice injection technique can minimise pain[1]
- Consumer attitudes can influence the level of pain experienced – and consumer attitudes are influenced by their nurses and doctors[2]
- Newer depot agents may be less painful than older agents[3] – studies show them to be well tolerated[4–6]

1. Workman 1999. **2.** Bloch et al. 2001. **3.** Keith et al. 2004. **4.** Lasser et al. 2004. **5.** Taylor et al. 2009. **6.** Lauriello et al. 2008.

Summary

- LAIs are not just an agent of last resort for consumers who are non-adherent
- They have many advantages over oral antipsychotic formulations, and they are often preferred by consumers
- Newer atypical antipsychotic LAIs are now available, and these may be better tolerated than older agents
- MHNs have a key role in educating and working collaboratively with consumers, and in making depot administration as pain-free and positive an experience as possible

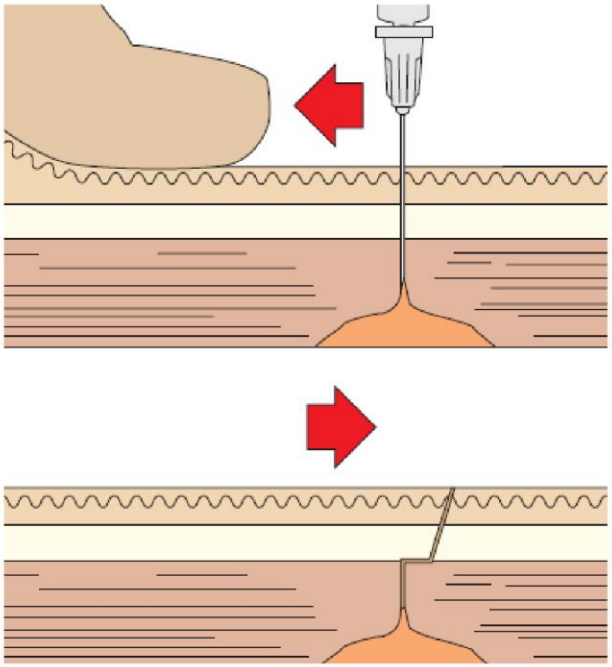
Injection techniques

Summary of critical points

- Selecting an appropriate injection site is critical[1]
- Use a needle that is long enough to penetrate the targeted muscle site (based on manufacturers' instructions and individual consumer factors)[1]
- Use the Z-track technique[1]
- Depot medications MUST reach the muscle or they will not be effective[1,2]

1. Cocoman et al. 2008. **2.** Wynaden et al. 2006.

The Z-track technique[1]

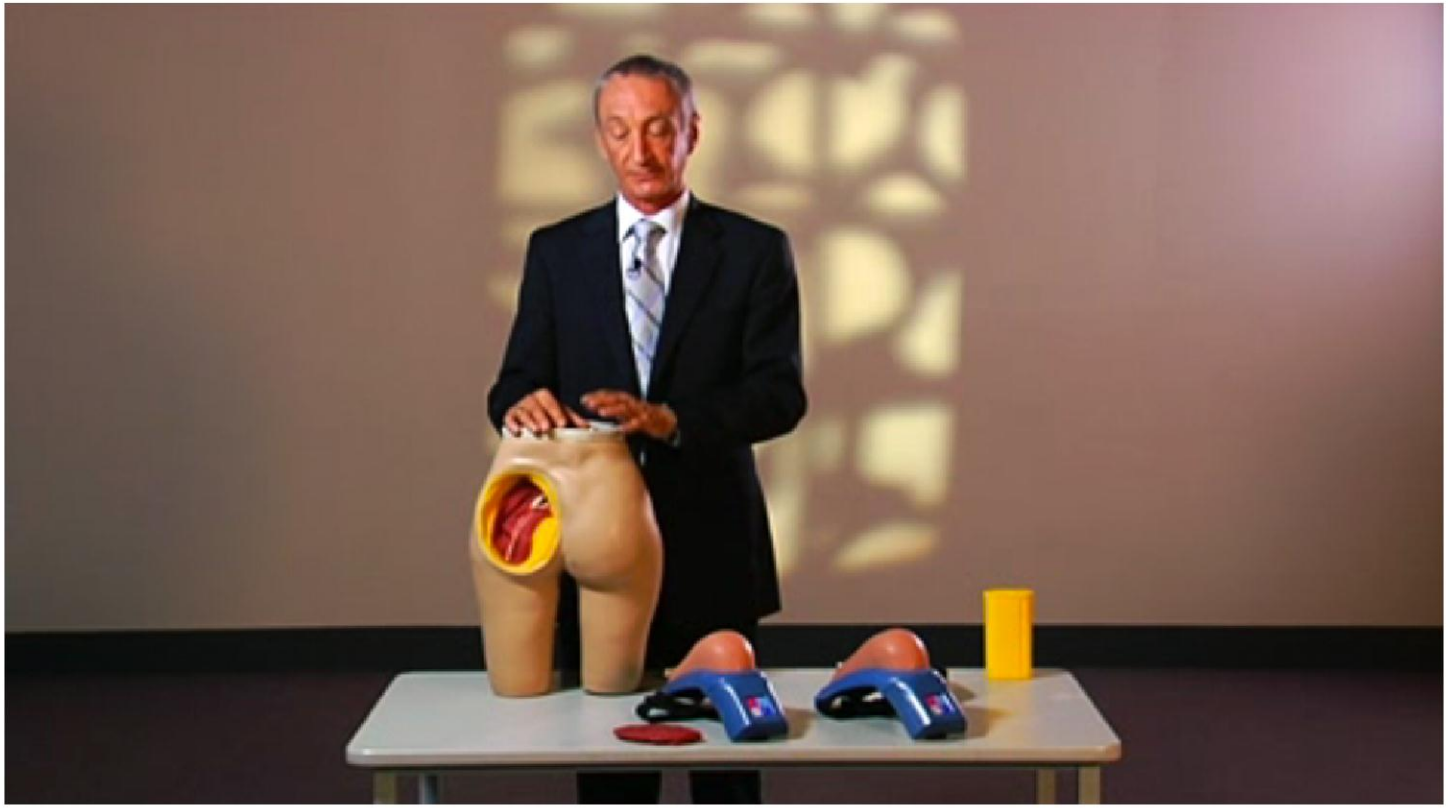


- Pull skin down or to one side at intended site
- Aim for the underlying muscle
- Insert needle and give injection
- Allow 10 seconds before removing the needle
- Release the retracted skin as you remove the needle
- The medication deposit will then be trapped under the tissues, preventing leakage

1. Adapted from Workman 1999.

Selection of injection site

Ventrogluteal injection site



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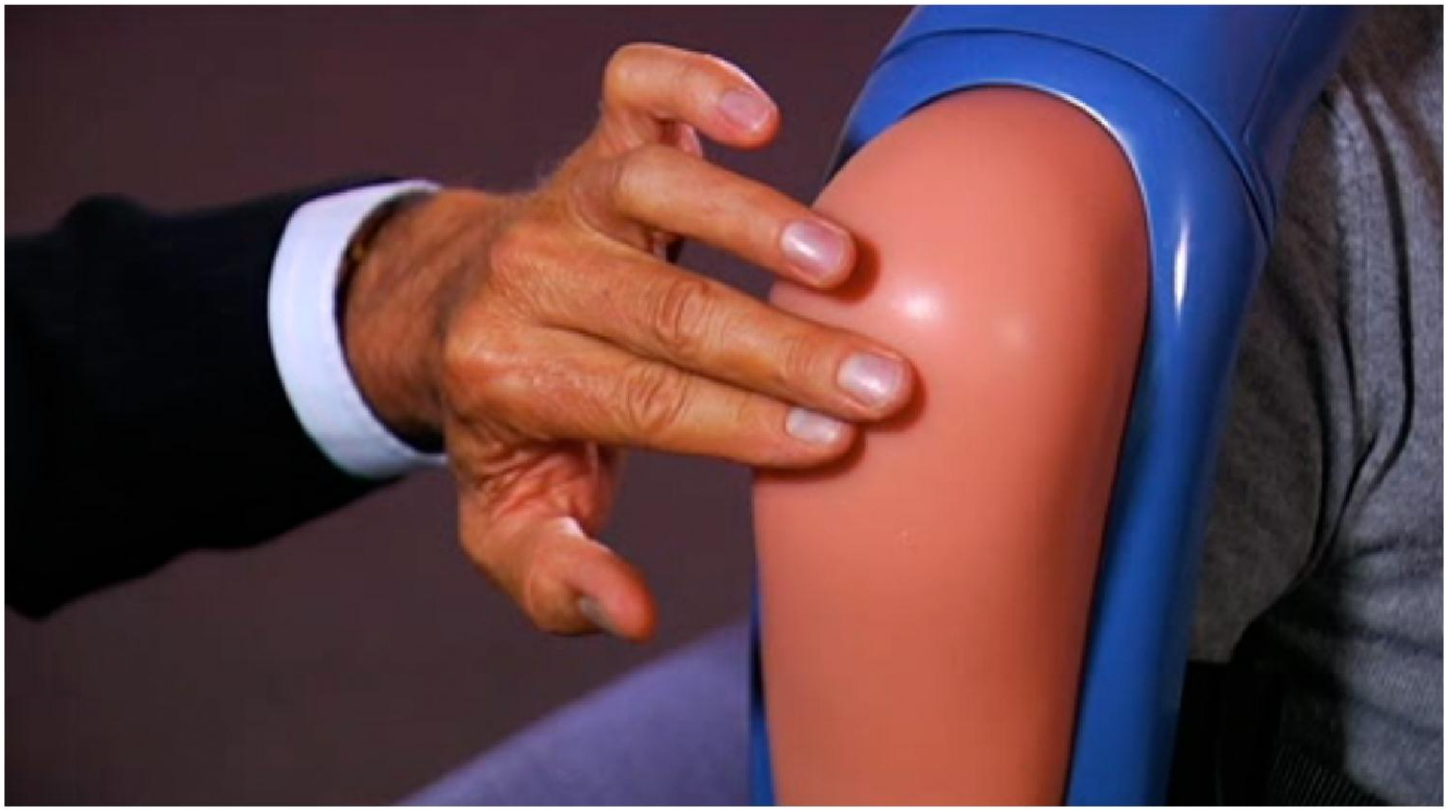
Dorsogluteal injection site

Deltoid injection site



Safety notes

- Follow protocol with respect to hand-washing, cleansing of injection site, use of gloves and aprons[1]
- Take care when drawing up medications and when breaking glass vials[1]
- Dispose of needles and other paraphernalia according to protocol
- See protocols and guidelines provided by your health service
- General guidelines have also been published by some researchers[2,3]

1. Workman 1999. **2.** Wynaden et al. 2006. **3.** Cocoman et al. 2008.