

Safe insulin prescribing tip 3

“Have I prescribed the correct insulin?”

What has happened here?

Scenario

A patient is admitted to hospital. They are on insulin and inform the prescriber that they normally inject Humalog insulin 22 units in the morning and 22 units in the evening. The prescription is presented in figure 1.

Figure 1: Insulin prescription

Drug Name	HUMALOG INSULIN			C N	0800
Dose	22	Units	UNITI	Route	S/C
Start Date				1/11	
Pharmacy				Stop date/sig.	1400
Other instructions	HUMALOG 15 mins pre-meals				2200
Prescriber signature	[Signature]			1234	

Reflection points:

- Is the prescription correct?
- What could happen if this insulin was given?
- Using the table below, what insulin do you think the patient is really using?

Table 1: Typical frequencies of common insulins

Insulin type	Example insulins	Typical frequency	With meals?
Rapid acting analogues	NovoRapid	TDS (three times a day)	Yes, typically 15 mins before
	Humalog		
	Apidra		
Short acting	Actrapid	TDS (three times a day)	Yes, typically 30 mins before meals
	Humulin S		
Intermediate acting	Humulin I	OD or BD (once or twice daily)	Doesn't matter
	Insulatard		
	Insuman Basal		
Long acting	Lantus	OD or BD (once or twice daily)	Doesn't matter
	Toujeo		
	Levemir		
	Tresiba		
Biphasic insulin	NovoMix 30	Typically BD (twice daily)	Yes, typically 15 mins before
	Humalog Mix 25 or 50		Yes, typically 30 mins before meals
	Humulin M3		

So what happened?

In the above example (figure 1) Humalog was prescribed instead of **Humalog Mix 25**. In this case, 22 units of rapid acting insulin would be given instead of 5.5 units (i.e. 25% of 22 units of Humalog Mix 25) increasing the risk of a hypoglycaemic episode.

The NPSA reported 2,201 medication incidents over 6 years involving the wrong insulin. Use **table 1** to familiarise yourself with typical frequencies of the common insulins and be aware of common mistakes as illustrated in **table 2** below.

Prescribing tips

- Always **check with the patient** what insulin they are on but remember;
 - Patients may be confused or use an incorrect name
- **So, Sense check** the prescription
 - Does it look correct?
 - Is it a typical frequency for that insulin?
 - If it is not a typical frequency, stop and think, is it correct?
 - If in doubt check elsewhere to confirm the type, dose and frequency of insulin

Table 2: Commonly confused insulins

Insulin	Confused with
Humalog	Humalog Mix 25 or Mix 50
NovoRAPID	NovoMIX 30
“Humulin”	Humulin S, Humulin I, Humulin M3
Lantus	Levemir
Insulin glargine (Lantus)	Insulin glulisine (Apidra) therefore always prescribe insulin by brand