DHBNZ Safe and Quality Use of Medicines Group Newsletter

quality safe use of medicines

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What's new

Potassium concentrate injection and potassium pre-mixes

Capital and Coast DHB have shared their report on potassium chloride concentrate being injected when heparinised saline was intended so that lessons can be learnt. The patient arrested but was resuscitated. This is the first confirmed New Zealand report of this error although it may have happened before. The risk of this happening again can be minimised by storing the concentrate injection in a locked cupboard or container away from other similar looking injections e.g. in the controlled drug safe so that a double signature is required or in a click clack box. The risk is negated if all potassium chloride concentrate injection is removed from a ward and replaced by pre-mixed potassium bags.

SQM group have been working to increase the range of pre-mixed potassium solutions available in New Zealand. The potassium chloride 10mmol in 10% glucose pre-mix can now be ordered as a section 29 product and names supplied retrospectively.

There are two short power point presentations available on the SQM website that people can adapt for use in their own organisation. Clinicians sometimes need to change their individual preference for a fluid regime and this can seem difficult and unnecessary but is not impossible.

Heparin pre-mixed bags

Baxters have discontinued manufacture of these at their Sydney manufacturing plant because of the low purchase numbers. Baxters have apologised for doing this without first consulting the sector, seemingly unaware that some hospitals had either just introduced the bags onto pilot wards or were planning to implement use of the bags hospital-wide after piloting on selected wards.

Baxters have offered to compound the bags in their Auckland facility in the interim but these bags will be more expensive and have a shorter shelf life than the manufactured bags produced in Australia. Baxters are hoping that if they can identify sufficient usage around New Zealand, they can re-introduce manufacture of the bags in Sydney.

SQM Group campaigned for the registration and production of the pre-mixed heparin bags to reduce the risk associated with unfractionated heparin therapy. An audit carried out across the three Auckland DHBs identified the safety issues around unfractionated heparin use[1].

SQM Group ask that you contact Beth Loe (Beth.Loe@waitematadhb.govt.nz) if you were planning on either introducing the pre-mixed bags or increasing the usage in your hospital because a pilot was complete or nearing completion.

Reference

1. Loe EA, Parsotam N, Blumgart A & Jansen L. Inter-regional collaboration for errors and near misses with unfractionated heparin JPharm Pract Res 2008; 38:209 –11

Incidents and Cautions

Different strengths of methotrexate tablets can cause confusion:

A recently admitted rheumatoid arthritis patient had a 20mg weekly dose of methotrexate documented in their clinical record. However, the medicines reconciliation process on admission to hospital identified that the patient had only been taking 5mg weekly for the past seven months. This was due to confusion caused by a new prescription for 8 x 2.5mg tablets when the patient had previously been prescribed and had been taking 2 x 10mg tablets. No-one had explained the change in strength and so the patient had continued taking the same number of tablets as previously. When the patient had an exacerbation of their rheumatoid arthritis four months after receiving the prescription for 8 x 2.5mg the rheumatologist prescribed leflunomide believing that the patient was still taking 20mg methotrexate weekly. The need for leflunomide is now under review and re-titration of the methotrexate dose underway.

This is a classic systems failure. Patients often see different doctors at clinic appointments and may visit different pharmacies to have their prescriptions dispensed. It is recommended that clinicians standardise their prescribing to one strength of methotrexate tablet if possible — 2.5mg, to prevent this incident happening again. If it is necessary to use the 10mg strength ensure that patients are clear on how many tablets they should be taking.

Morphine and Methadone overdoses

Three incidents (two involving methadone oral liquid and one involving morphine oral solution) have been reported in one DHB. In each case 10 times the prescribed dose was administered. Following the first incident it was agreed to only stock one strength of both methadone liquid and morphine solution. The clinicians agreed to only stock the higher strength — this has not prevented a further two overdoses and because the higher strength is involved there is an increased risk.

Have similar 10 times overdoses occurred in your DHB in the last 12 months? SQM Group would be grateful if you could forward the details and number of these incidents to Beth Loe, Beth.Loe@waitematadhb.govt.nz. If your DHB identified any safety measures to prevent similar incidents occurring please include details so that these can be shared with other DHBs

Look alike names

Early notice — look out for new product Avanza® (mirtazapine) looks like Avandia® (rosiglitazone).

Upcoming Events

IHI 21st National Forum on Quality Improvement in Health Care 6—9 Dec 2009, Orlando, Florida. See this link for further information—http://www.ihi.org/IHI/Programs/ConferencesAndSeminars/21stAnnualNationalForumonQualityImprovementinHealthCare.htm

Change Champions, 3rd Improving Medication Safety Seminar: sharing the lessons learnt, 9-10 March 2010 and The Deteriorating Patient, 11-12 March 2010. Both of these seminars will be held at Four Seasons Hotel, 199 George St, Sydney, NSW. See this link for further information-http://www.changechampions.com.au/upcoming-seminars

Useful links and articles

Wong JD, Bajcar JM et al. Medication reconciliation at hospital discharge: evaluating discrepancies. Annals of Pharmacotherapy 2008: 42(10); 1373-1379

The Joint Commission: Leadership committed to safety. Sentinel Event Alert: 43; August 27, 2009.

Miran Brvar, Nina Fokter et al. The frequency of adverse drug related admissions according to method of detection, admission urgency and medical department speciality. URL: http://www.medscape.com/viewarticle/705356?src=emailthis

National Patient Safety Agency, national reporting and learning service, Safety in Doses—improving the use of medicine in the NHS, learning from national reporting 2007. URL: http://www.npsa.nhs.uk/EasySiteWeb/GatewayLink.aspx?alId=61618