

Issue

Sound-alike look-alike drug (SALAD) errors can occur in maternity care with potentially devastating consequences. If a prostaglandin analogue e.g. misoprostol or dinoprostone, is used in error during pregnancy, preterm delivery and fetal/neonatal death may occur. Such errors have occurred internationally and in Ireland in women receiving progesterone supplements to prevent preterm delivery. Widespread awareness of these errors in maternity units, community pharmacies and GP practices may reduce the risk of recurrence.

Evidence of Harm ^{1,2}

- A woman was prescribed a progesterone pessary due to threatened preterm labour at 28 weeks' gestation. A nurse administered Prostin E2[®] (dinoprostone) in error. Over the following hours the patient became increasingly unwell, complaining of back pain and abdominal cramping. A baby boy was subsequently delivered who required NICU admission.
- Two women, admitted for bedrest due to threatened preterm delivery, were administered Prostin E2[®] (dinoprostone) instead of progesterone. The first woman's twins died following delivery at 4 months' gestation. Several hours later the same error occurred, with another woman delivering a baby girl at 28 weeks' gestation who subsequently developed neurodevelopmental impairment.
- A woman was prescribed Cyclogest[®] (progesterone) 200 mg pessaries for threatened preterm delivery. Cytotec[®] (misoprostol) 200 microgram tablets were dispensed in a community pharmacy. The woman used the Cytotec[®] tablets vaginally and presented to a maternity hospital with contractions which later settled.

How to Reduce the Risk

The following risk reduction strategies may reduce the risk of these errors recurring:

- Implement current IMSN recommendations to reduce the risk of SALAD errors³
- Provide induction training for new staff to highlight the risk of SALAD errors
- Ensure that prescriptions are complete and legible, spelling "microgram" in full
- Prostaglandin analogues and progesterone supplements should be prescribed both generically and by brand name of the intended product
- Maternity units should review their processes for the storage and supply of prostaglandin analogues
- Pharmacies should segregate storage of prostaglandin analogues to reduce the risk of SALAD errors
- Implement appropriate checking processes for dispensing and administration of relevant medications
- Health professionals must be aware of the patient's condition and indication for use of a prostaglandin analogue or progesterone supplement

Introduction of electronic health records will facilitate further risk reduction strategies such as printed prescriptions and barcode scanning of patient identification and medication against the medication administration record to ensure that the correct medication has been selected. In electronic prescribing systems, users must be aware of the risk of selection errors. The introduction of electronic transmission of prescriptions will also reduce the risk of dispensing errors related to illegible prescriptions.

All healthcare professionals involved in the care of pregnant women must understand the risk posed by these sound-alike look-alike errors.

Submit any near misses, medication errors or adverse drug reactions to local incident reporting systems, to the Health Products Regulatory Agency (www.hpra.ie) and the State Claims Agency.

References

1. Cohen MR, Smetzer JL. Varizig Dilution Issue Reported; Prostin E2 Suppository Confused with Progesterone; FIRST Brand Oral Vancomycin Needs Improved Labeling. Hospital Pharmacy. 2014;49(11):1001-8.
2. Patel A. Tragic Medication Errors Result in Accidental Abortions and Premature Birth. ABC News URL:<http://abcnews.go.com/Blotter/story?id=8383062>. Accessed: 6th September 2016. (Archived by WebCite® at <http://www.webcitation.org/6kjbAzzkO>) 2009.
3. Irish Medication Safety Network. Briefing Document on Sound-Alike Look-Alike Drugs (SALADs). 2017

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