Medicines Safety Matters

A Newsletter from the Derbyshire and Nottinghamshire CCGs Medicines Safety Officers Network. Issue 12 - May 2019

Welcome to our regular edition of Medicines Safety Matters; a newsletter produced by your local CCG Medicines Safety Officers. Our aim is to highlight to you medication incidents that have occurred both locally and nationally, thus promoting and supporting safer practice.

Key Messages in this Edition

- Antipsychotics and QT prolongation
- Medication errors with rivastigmine patches
- Sodium valproate guidance reminder
- Carbimazole
- Fluoroquinolone antibiotics

Local Incident: Antipsychotics and QT prolongation

A patient taking chlorpromazine, citalopram, nortriptyline and pregabalin was found to have a significantly prolonged QT interval following a routine ECG requested after a GP medication review. After seeking specialist mental health input, the patient's medication was changed to sulpiride and sertraline. A repeat ECG conducted a week later was normal. The patient did experience some withdrawal symptoms but was asymptomatic from a cardiac perspective throughout.

Although rare many anti-psychotics and antidepressants are known to prolong the QT interval. This can lead to serious arrhythmias such as torsade de pointes and sudden cardiac death.
A baseline ECG is usually carried out before commencing anti-psychotics but an annual ECG should be considered for patients at high risk or with multiple risk factors.

Who is at high risk?

- Patients with pre-existing heart problems
- Age over 65
- Female sex
- On multiple QT prolonging drugs (see SPC www.medicines.org.uk or credible meds database https://crediblemeds.org/)
- High concentrations of QT prolonging drugs due to high dose, poor clearance or drug interactions
- Abnormal electrolytes – e.g. hypokalaemia or hypomagnesaemia

There is some useful general information on QT prolongation here:
https://www.sps.nhs.uk/wp-content/uploads/2017/09/QA237_2_DruginducedQTprolongation-2017-update.pdf
For further information on prescribing anti-psychotics please refer to your local formulary.

REMINDER—Valproate PPP

Following publication of the strengthened regulatory position on sodium valproate prescribing in women and girls please be advised that updated guidance & resources, including new Risk Acknowledgement Form & patient information leaflets can be found here

Medication Errors with Rivastigmine Patches

The number of manufacturers and range of rivastigmine patches in the UK are increasing. Despite the MHRA Drug Safety Update issued in 2014, medication errors continue to be reported. The most frequently reported causes were lack of patch removal and application of more than one patch at the same time. Other causes were application of the patch to non-recommended sites; patch application to the same area for several weeks; cutting the patch into several pieces; and dose errors in prescribing or dispensing.

Symptoms of rivastigmine overdose include nausea, vomiting, diarrhoea, hypertension, and hallucinations; bradycardia and/or syncope, associated with malaise or falls, may also occur. In case of suspected overdose, all rivastigmine patches should be removed immediately and no further patch should be applied for the next 24 hours.

It is important to instruct patients and caregivers on the proper use of the transdermal patch, particularly that:

- Only one patch should be applied per day to healthy skin on the upper or lower back, upper arm, or chest
- The patch should be replaced by a new one after 24 hours, and the previous day's patch must be removed before application of a new patch to a different skin location
- Application to the same skin location within 14 days should be avoided to minimise skin irritation
- The patch should not be cut into pieces
- Do not expose the patch to external heat sources (e.g. excessive sunlight, saunas, solarium) for long periods of time

Suggestions for mitigating the risk of patient safety incidents include:

- Dosage instructions to specify that only ONE patch to be applied at a time e.g. *Apply ONE patch every TWENTY-FOUR hours. Remove and discard old patch before applying new patch to a different location*
- Improving the awareness of the rivastigmine patch product range
- Giving clear instructions to patients and relatives as well as to healthcare personnel to avoid administration errors.
- A review of electronic prescribing systems and product storage is also suggested to prevent errors of wrong product or strength (e.g confusion between rivastigmine and *rotigotine* patches)

Fluoroquinolone Antibiotics

There have been a number of MHRA alerts for this class of antibiotics which includes the drugs ciprofloxacin, levofloxacin, moxifloxacin and ofloxacin.
In November 2018 due to a small increased risk of aortic aneurysm and dissection with systemic and inhaled fluoroquinolones, it was recommended that they should only be used following a careful benefit-risk assessment.
Another alert was subsequently published in March 2019 recommending restricted indications

- Please refer to your local antimicrobial guidelines before prescribing fluoroquinolones
- **DO NOT PRESCRIBE**:
  - for patients who have previously had serious adverse reactions
  - for use with corticosteroids – as co-administration could exacerbate tendinitis or tendon rupture
  - for non-severe or self-limiting infections, or non-bacterial conditions
  - for some mild to moderate infections or uncomplicated cystitis unless other recommended antibiotics are not inappropriate
- **ONLY PRESCRIBE WITH SPECIAL CAUTION** for people >60 years, those with renal impairment or solid-organ transplants and only for patients at risk for aortic aneurysm/dissection after careful benefit-risk assessment and consideration of other options
- Treatment should be discontinued at the first signs of a serious adverse reaction, including tendon pain or inflammation and patients advised to seek immediate medical attention in the case of sudden-onset severe abdominal, chest or back pain.
- Report suspected adverse drug reactions via the Yellow Card scheme

References

https://www.gov.uk/drug-safety-update/systemic-and-inhaled-fluoroquinolones-small-increased-risk-of-aortic-aneurysm-and-dissection-advice-for-prescribing-in-high-risk-patients
https://www.gov.uk/drug-safety-update/fluoroquinolone-antibiotics-new-restrictions-and-precautions-for-use-due-to-very-rare-reports-of-disabling-and-potentially-long-lasting-or-irreversible-side-effects

Carbimazole

In February 2019, the MHRA issued a reminder to all healthcare professionals, to ensure females of child-bearing age use effective contraception* during carbimazole treatment.
The use of carbimazole in pregnancy, especially during the first trimester, and at doses greater than 15mg per day, is associated with an increased risk of congenital malformations.

Advice for healthcare professionals

- Women of child-bearing age on carbimazole should use effective contraception* during treatment. The Faculty of Sexual and Reproductive Health (FSRH) provides a statement on "*Contraception for women using known teratogenic drugs or drugs with potential teratogenic effects*"
- Carbimazole should only be prescribed in pregnancy when clinically indicated and after a strict individual risk/ benefit assessment of the patient. The use of carbimazole during pregnancy should be preserved for the situations in which a definitive therapy of the underlying disease (thyroidectomy or radioiodine treatment) was not suitable prior to pregnancy and in case of new occurrence or reoccurrence during pregnancy.
- If prescribed, the lowest effective dose should be prescribed which does not require additional thyroid hormone administration.
- Close monitoring of the mother, foetus and neonate is recommended during pregnancy if carbimazole taken.
- Women, who become pregnant, suspect pregnancy or plan to have a baby during treatment with carbimazole should be seen by their doctor straight away.

Reporting drug reactions

The MHRA are reminding healthcare professionals to report all suspected adverse drug interactions (ADRs) to the **Yellow Card Scheme** – this is via the Yellow Card website or Yellow Card App available on iOS devices and Android devices. The Yellow Card App has been updated with an easy login, increased stability, new features, and questions on medicines in pregnancy.

* When using any medicine with teratogenic potential, a woman should be advised of the risks and encouraged to use the most effective contraceptive method taking into account her personal circumstances. See Drug Safety Update March 2019 for guidance on contraceptive methods and frequency of pregnancy testing to reduce inadvertent exposures during pregnancy in a woman taking a medicine of teratogenic potential.