PRESCRIBING NEWS

NHS Milton Keynes

May 2011

Update from Prescribing Group, May 2011

- Dr Karia was welcomed as a representative of GP Healthcare MK and Dr Whiteman attended her first meeting as Medical Director for NHSMK.
- It was noted that a pain management algorithm had been approved by the Pain Team. This will be circulated to practices. It sets out steps to be taken before referral to the Pain Clinic.
- The new QoF indicators were discussed.
- Further work to improve patients' inhaler technique is being progressed with some regional funding. This will include patient information leaflets and the provision of Medicine Use Reviews in community pharmacy.
- A template letter will be circulated to practices for use when hospital physicians ask GPs to prescribe non-formulary medicines.

Update from Medicines and Therapeutics Committee, February 2011 and April 2011

- Ella-One was approved for use as emergency contraception. Levonelle 1500 remains the first line choice for use up to 72 hours after coitus. Ella-One may be used between 72 hours and 120 hours.
- Pivmecillinam was added to the formulary strictly for use on the recommendation of the Microbiologist for UTIs resistant to trimethoprim and nitrofurantoin.
- Nicorette Invisi Patch was added to the formulary for use when a 16 hour patch or higher dose is required.
- The two strengths of EpiPen were added along with the 500mcg strength of Anapen for use in adults

New QoF indicators for prescribing

The 2011-12 GMS contract contains a number of new QoF indicators including a set designed to support QIPP (Quality, Innovation, Prevention and Productivity). QP 1 – 5 covers prescribing whilst QP 6 – 13 support referral management, care pathway design and emergency admissions review. The details of QP 1-5 are:-

QP1 The practice conducts an internal review of their prescribing to assess whether it is clinically appropriate and cost effective, agrees with the PCO three areas for improvement and produces a draft plan for each area no later than 30 June 2011

QP2 The practice participates in an external peer review of prescribing with a group of practices and agrees plans for three prescribing areas for improvement firstly with the group and then with the PCO no later than 30 September 2011.

QP3-5 The percentage of prescriptions complying with the agreed plan for each improvement area as a percentage of all prescriptions in that improvement area during the period 1 January 2012 to 31 March 2012.

The national QIPP list of therapeutic targets was featured in the September 2010 edition of Prescribing News. This is available on the intranet (see below). The QP targets are taken from a reduced list of those that can be benchmarked against national data. The Pharmaceutical Advisers will issue further information to practices shortly.

The indicators MM6 and 10 remain. As usual, the Pharmaceutical Advisers will discuss topics for these and the new QIPP indicators with you at the practice visits. Please book an appointment if you haven't already done so.

Medicines Management section of the website has moved!

To access the Medicines Management pages please follow the link to http://www.qualitymk.nhs.uk/ you will see Prescribing and Medicines Management in the drop down list on the left hand side. Community pharmacy pages are also held on the site. Access is available without the use of a password.

Learning from incidents

We are aware of several incidents where information from hospital discharge letters has been incorrectly added to the repeat prescribing system because the hospital only stocks one strength of tablet and the patient has to take half to provide the correct dose. An example recently was a discharge for citalopram 20mg half a tablet daily as the patient required a 10mg dose but pharmacy only kept 20mg tablets. This was transposed into the practice record as 20mg daily. The hospital pharmacy is reviewing the strengths of tablets that it stocks, but prescribers are reminded to read the discharge letters carefully to avoid such errors.

Respiratory MUR Project

Following on from the inhaler work to date, the PCT has agreed to participate in a new SHA-wide project to measure how improved technique will also improve symptoms. When intervening to coach the patient on inhaler technique, the project allows community pharmacists to score self-assessment of respiratory condition (using ACT or CAT scoring system). This is repeated 3 months later meaning that any change can be measured. The pharmacists will conduct that intervention as part of an MUR – so GPs may notice an increase in reporting of patient issues with inhalers.

Participating pharmacists will receive additional training around teaching inhaler technique (similar to Train the Trainer) as well as training on the causes of poor compliance – belief, device and medicine related.

The PCT plans to launch a public campaign to raise awareness of the benefits of using inhalers correctly and the importance of having technique checked regularly, encouraging patients to bring their inhalers with them to any review appointments. The project will also allow us to develop effective patient information material. This project should therefore demonstrate the benefits of collaborative working – using the skills of each professional appropriately.

Antibiotics and other medicines with hormonal contraception – key changes to advice
New guidance was published in January 2011 by the Faculty of Sexual and Reproductive Healthcare on drug interactions with hormonal contraception. A key change is that women taking combined oral contraceptives no longer require additional contraceptive precautions during or after courses of antibiotics (unless those antibiotics induce liver enzymes, e.g. rifampicin).

Interaction between antibiotics and COCs
Overall the evidence does not generally support reduced COC efficacy with non-enzyme-inducing antibiotics. As a result, additional precautions are **no longer required** to maintain contraceptive efficacy when using antibiotics that are not enzyme inducers with combined hormonal methods for durations of 3 weeks or less, **unless** diarrhoea and vomiting occur. Health professionals should remind women about the importance of correct contraceptive practice during periods of illness. However, it is still accepted that additional contraceptive precautions should be advised with enzyme inducers. Rifampicin-like drugs (e.g. rifampicin, rifabutin) are the only antibiotics that are enzyme inducers and that have consistently been shown to reduce serum levels of ethinylestradiol.

Other enzyme-inducing drugs
All women starting enzyme-inducing drugs should be advised to use a reliable contraceptive method unaffected by enzyme inducers (eg. progestogen-only injectable, copper-bearing intrauterine device or levonorgestrel-releasing intrauterine system).

Coumarin anticoagulants (e.g. warfarin)
Use of oestrogens and/or progestogens has been associated with both increased and decreased anticoagulant effect of coumarin anticoagulants. Given the lack of consistent evidence a true interaction is unlikely.

Lansoprazole
There is good evidence that lansoprazole does not induce or inhibit the enzymes involved in the metabolism of contraceptive hormones.

Lamotrigine
New evidence suggests that COCs should not usually be recommended in women on lamotrigine monotherapy due to the risk of reduced seizure control whilst taking a COC and the potential lamotrigine toxicity in the COC-free week. The clinical significance of this interaction is unknown and further evidence would be required to alter existing recommendations.

Changes to insulin products
Please note that Humalog is now only available as the KwikPen prefilled injection device.

Following the discontinuation of the Mixtard range of insulin products there have been enquiries from prescribers about alternative insulin products which can be used with the Innolet device which was previously available with the Mixtard insulin range. The Innolet device is useful for patients with eyesight problems or restricted manual dexterity as it has a dial with a range of 1-50units allowing 1 unit dose adjustment. The Innolet device remains available with an intermediate acting insulin as Insulatard Innolet in packs of 5x3ml injection devices and this product may be a suitable alternative after review and discussion with the patient where they cannot manage an insulin pen device. Dosage adjustment may be necessary.

(For information the Innolet device is also available as Levemir Innolet (insulin detemir) which should only be prescribed in accordance with NICE guidance.)

The Insulin Passport – A Patient Safety Alert from the NPSA (NPSA/2011/PSA 003)

The aim of this Alert is to improve patient safety by empowering patients as they take an active role in their treatment with insulin.

This will be achieved with a patient information booklet and a patient-held record (the Insulin Passport) which documents the patient's current insulin products and enables a safety check for prescribing, dispensing and administration. The Insulin Passport will complement existing systems for ensuring key information is accessed across healthcare sectors.
NHS organisations should ensure that by 31 August 2012:
1. Adult patients on insulin therapy receive a patient information booklet and an Insulin Passport to help provide accurate identification of their current insulin products and provide essential information across healthcare sectors.

2. Healthcare professionals and patients are informed how the Insulin Passport and associated patient information can be used to improve safety.

3. When prescriptions of insulin are prescribed, dispensed or administered, healthcare professionals cross-reference available information to confirm the correct identity of insulin products.

4. Systems are in place to enable hospital inpatients to self-administer insulin where feasible and safe.

Therefore, patients on insulin therapy should be supplied with an information booklet and Insulin Passport during a consultation with their healthcare professional managing their diabetes or when receiving insulin from a pharmacy. These are available to order from June 2011 by phone: 0845 610 1112 or by email: nhsforms@mmm.com

SPC update for Calcichew D3 and D3 forte (and other calcium containing products) with interactions of quinolones
The absorption of quinolone antibiotics may be impaired if administered concomitantly with calcium. Quinolone antibiotics should be taken two hours before or after intake of calcium.

Please also note that Calcichew D3 caplets have been introduced. These contain 400 iu vitamin D and 1.25g calcium so are equivalent to the Calcichew D3 Forte tablets. Please take care when prescribing.

Medical Protection Society Report highlights poor asthma management resulting in death

This case report from the Medical Protection Society (MPS) describes the poor medical practice that led to the death of a young asthmatic man.

The patient had poorly controlled asthma, had been admitted to hospital several times over his life with exacerbations of asthma, and had attended his single-handed GP practice many times about his asthma. However, there was no record in his notes that his inhaler technique had ever been checked or that his peak flow had been measured.

Over the course of several days as his asthma worsened, the patient had telephone consultations with his GP who left him a prescription for some antibiotics and steroids later on but was not asked to come to the surgery to be examined on each of these occasions. As the GP had not documented a full history of this patient's asthma, he was thus unaware that his usual control was poor or that he had attended the Emergency Department (ED) twice over the last year, resulting in admission, one of which necessitated a stay on the high dependency unit, and there was no hospital follow-up. Following further deterioration, the patient's wife booked him an emergency appointment at the surgery, where he became extremely short of breath and collapsed in the surgery with a respiratory arrest. The GP did not attempt to start resuscitation as he felt de-skilled in his resuscitation knowledge, and the patient was declared dead after 45 minutes of attempted resuscitation by paramedics and ED doctors. The patient's wife made a claim about the long-term management of her husband's asthma and the acute incident. The case was settled for a substantial sum. An independent investigation was highly critical of the long-term and acute management of the asthma and of the de-skilling, lack of equipment and of practice management.

The MPS draws attention to the BTS/SIGN guidelines 2008, which states that inhalers should only be prescribed after patients have received training in the use of the device and have demonstrated satisfactory technique. It also highlights that many of the deaths attributable to asthma occurred in patients with inadequate objective monitoring of their asthma.

Theophylline dosing
Theophylline is metabolised in the liver. The plasma-theophylline concentration is *increased* in heart failure, hepatic impairment, viral infections, in the elderly, and by drugs that inhibit its metabolism. The plasma-theophylline concentration is *decreased* in smokers, by alcohol consumption, and by drugs that induce its metabolism. Please see the BNF for interactions

It is advisable to recheck plasma level after each dose adjustment and every 6 – 12 months once a maintenance dose has been reached. Take the level immediately prior to next dose.

Differences in the half-life of theophylline are important because the toxic dose is close to the therapeutic dose. In most individuals, satisfactory bronchodilation is associated with a plasma-theophylline concentration of 10–20 mg/litre , although a lower plasma-theophylline concentration may be effective. Adverse effects can occur within the range 10–20 mg/litre and both the frequency and severity increase above 20 mg/litre.

PPIs and bisphosphonates – should PPIs be stopped?

An observational study suggests that concurrent use of proton-pump inhibitors (PPIs) with alendronate taken for prevention of osteoporotic fractures is associated with reduced anti-fracture effectiveness of the bisphosphonate.

PPIs are widely used in the elderly population, who are also the main users of bisphosphonates for prevention of osteoporotic fractures. There is some evidence that PPIs may be associated with increased fracture risk, and may also interfere with the effects of bisphosphonates. The authors therefore carried out this open-label population-based cohort study to examine the effect of alendronate use, according to adherence, on fracture risk in patients taking and not taking PPIs; they also compared outcomes in two positive control groups – those taking histamine H2 blockers (H2RA; marker for GI morbidity) and systemic corticosteroids (high fracture risk). The study cohort included all patients aged at least 35 who filled at least one prescription for alendronate in Denmark starting between January 1996 and December 2005 and had not previously filled any prescription for drugs used for osteoporotic fracture prevention. Index date was the first prescription for alendronate, and prescriptions for PPIs, H2RA, and oral corticosteroids were identified and classed as baseline and current use. Primary outcome was hip fracture, with other fractures as secondary outcomes, all identified from comprehensive national hospital discharge data and according to medication possession ratio (MPR – a standard measure of compliance to therapy).

38,088 people fulfilled the study criteria and were included in the analysis. The mean age was 71, and most were female (83%); only 2.5% had recorded peptic ulcer disease in the preceding three years. Use of corticosteroids and PPI in the 12 months up to the index date was high, at 26% and 18.1% respectively, with 5.5% receiving H2RA during this period; 26% took a PPI at some point during the first three years of alendronate therapy.

In the study cohort, 2,071 people had a hip fracture, and 1,110 had a non-hip osteoporotic fracture. High compliance with alendronate therapy was associated with a significant reduction in the risk of fracture (for 100% MPR, hazard ratio [HR], 0.61; 95% CI, 0.52 to 0.71; $P < .001$) in those who were not PPI users.

Concurrent PPI use was associated with a significant reduction in protection: in those with 100% alendronate MPR, the benefit of alendronate use on hip fracture risk in PPI users was not statistically significant (HR, 0.81; 95% CI, 0.64 to 1.01; $P = .06$). The effect was related to cumulative PPI, with no difference in response in those with 1 to 359 defined daily doses and increasing effects as cumulative exposure increased.

Concurrent H2RA use had no effect on alendronate effectiveness, with HR for hip fracture of 0.66 (95% CI, 0.58 to 0.75) for nonusers and 0.69 (95% CI, 0.45 to 1.05) for users. Similarly, there was no difference in alendronate effectiveness for corticosteroid users vs. non-users.

The authors conclude that this large cohort study confirms the beneficial effect of alendronate on the risk of hip fracture in elderly people. It also shows, however, that concurrent use of PPIs with alendronate was associated with a significant blunting of the benefits from alendronate; an effect that was not present with H2RA or when PPI use was only prior to starting alendronate. They note some potential mechanisms through which the effect could be mediated, both at the bone level and in the gut. They comment that PPIs are often prescribed inappropriately, and suggest that their data provide support for discouraging the use of these drugs in patients on alendronate wherever possible.

Lithium Policy

A new lithium policy has been approved. In line with NPSA good practice guidance, a lithium patient information booklet has been introduced locally.

The booklet contains important information about the patient's lithium treatment and has a section in it to record blood results. Patients are advised to take the booklet with them when they see their doctor, nurse or pharmacist. You are asked to record test results in it. They should take their booklet when they request a prescription or have a prescription dispensed.

Please remember that lithium should be prescribed by brand name.

Watch this space …. Guidance on the management of Vitamin D deficiency in children

We have been asked for advice on this by GPs and found that there are a number of regimens in use at the hospital. Some work is underway to agree a common policy. This will be circulated to primary care once the work has been completed.

The Pharmaceutical Advisers can be contacted on 01908 278713 / 278708 / 278744.