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The persisting hazard of co-proxamol

Dr Nick Bateman, Medical Director, CSM Scotland writes ...

Co-proxamol (paracetamol 325mg, dextropropoxyphene 32.5mg) is one of three main combinations of an opioid analgesic and paracetamol presently prescribed. Figures demonstrate this compound is the second most frequently prescribed combination in this class in Scotland. To many of us this is a surprise, as the quantities of analgesic in the preparation are generally regarded as clinically no more effective than 1 gram of paracetamol^{1,2}. It is, therefore, unclear why this compound should still be so popular with prescribers in primary care. This fact might mean little, were it not for the major additional hazard this medication has following overdose.

There has been concern about the risk of co-proxamol in overdose for more than 20 years, and a concerted effort was made to try and persuade both regulatory authorities and doctors to stop use of co-proxamol^{3,4}. Recent evidence published in the British Medical Journal demonstrates that in England and Wales co-proxamol overdose is one of the most frequent causes of drug-induced death¹, and similar statistics apply to Scotland. The reasons for this are likely to be the potential for dextropropoxyphene to cause malignant ventricular arrhythmia in overdose². This effect is theoretically more likely to occur in patients who are hypoxic, and the very mild opioid effect seen at therapeutic doses only becomes significant in terms of respiratory depression in overdose, particularly if consumed with alcohol or other CNS depressant drugs.

It is this combination of poor analgesic efficacy and major adverse effects in overdose that makes this drug so dangerous. Prescribers should also be aware that a significant minority of patients who take an overdose have not had the drug taken prescribed for them, but they are the property of another family member. Reducing the overall quantity of this compound in the community is therefore a public health target. Since the drug is very rarely used in hospital, primary care is the target for changing prescribing patterns.

A problem with all combination opioid paracetamol products is that the correct balance of opioid to paracetamol is rarely achieved. They are obviously easier to prescribe, and to take than the individual components. Titration of combination products is a major problem because of the paracetamol component. Two tablets four times a day is the maximum titratable dose. Since the half-lives of the active metabolites of both codeine and dihydrocodeine are only 3-4 hours patients may actually need more opioid for analgesic control.

Nevertheless a concerted effort to remove co-proxamol, which is both less efficacious and more toxic in overdose than the other competitors, is obviously very highly desirable. Work in other parts of the UK has shown that general practitioners can achieve this change with no obvious loss of patient satisfaction⁵. It is now time for Lothian prescribers to address this challenge.

Key messages:

- **Co-proxamol is one of the most frequent causes of drug induced death.**
- **Review all patients currently prescribed co-proxamol.**
- **If a patient requires a combination analgesic the LJM first choice in mild to moderate pain is co-codamol.**

References

1. Hawton K, Simkin S, Deeks J. Co-proxamol and suicide: a study of national mortality statistics and local non-fatal self poisonings. *BMJ* 2003;326:1006-8.
2. Bateman DN, Afshari R. Co-proxamol and suicide: Licence needs to be changed. *BMJ* 2003;327:287.
3. Young RJ, Lawson AA. Distalgesic poisoning - cause for concern. *BMJ* 1980;281:616-7.
4. Distalgesic and its equivalents: time for action. *Drug Ther Bull* 1983;21:17-9.
5. Fryers PT, Geraghty M, Hall C. Co-proxamol and suicide: Availability of co-proxamol has been successfully reduced in Doncaster. *BMJ* 2003;327:287.

Changes to peak flow meter scales

A new European Standard (EN13826) defines the minimum acceptable levels of accuracy and reproducibility. The peak flow meters available on the Drug Tariff are compliant with this Standard, which came into force on 1 September 2004.

Why has this happened?

Research has demonstrated inaccuracies in peak flow meter scales, which may result in an overestimation of actual peak flow. A Safety Action Notice¹ was circulated earlier this year to highlight this problem, which occurs with peak flow meters which do not bear the 'CE' logo.

What does this mean in practice?

New peak flow meters (identified by EU or CE marks) give different readings to previous meters. Peak flows from the new meters need to be interpreted using new published predicted equations (see




www.airwaysextra.com/AJJune2004-Miller-published.pdf). The new normal values for males and females can be viewed at www.peakflow.com.

What about patients who are still using old peak flow meters?

Values obtained using old meters can be converted to equivalent values from new meters. Over time, old meters will be gradually replaced with EU compliant meters. To avoid confusion during the transition period, recorded values in case notes, diaries and personal action plans should be marked 'EU' when the new meters have been used or values have been converted.

Dr Andrew Robson, Senior Clinical Scientist (Andy.Robson@luht.scot.nhs.uk) may be contacted if you require further information.

Key messages:

-  Be aware of the differences in peak flow readings between the old and the new peak flow meters.
-  Before prescribing or issuing a new peak flow meter, check that a patient's personal best and treatment levels have been re-assessed on the new scale.
-  Peak flow meters now available on the Drug Tariff comply with the new European Standard.

Reference

1. NHS Scotland Safety Action Notice. Peak expiratory flow meters. Scottish Healthcare Supplies. 5 July 2004. http://www.show.scot.nhs.uk/shs/hazards_safety/SANPDF/SAN0425.pdf

Our thanks go to Alastair Innes, Clinical Director for preparing this article.

Direct Access Ambulatory BP Monitoring in Lothian

Dr Paul Padfield, Consultant Physician, wishes to advertise the newly resurrected Direct Access Ambulatory BP Monitoring (ABPM) at the Western General Hospital (WGH).

Direct access to ABPM services is now available at the WGH and the Leith Community Treatment Centre (CTC). It is hoped that the service will be extended to other sites. Standard referral forms should be used.

Indications for ABPM include:




- Unusual BP variation
- Possible "white coat hypertension"
- Drug resistant hypertension
- Symptomatic hypotension

An ABPM report will include an interpretation of findings and individual advice and comment.

The Direct Access ABPM service was widely used in the past and the results of the survey of the service indicated that it had a significant impact on the management of patients. The survey concluded that ABPM reduced drug costs by preventing or deferring medical therapy in a significant proportion of patients.

(Full details are available from Dr Paul Padfield, Paul.Padfield@luht.scot.nhs.uk)

Key messages:

-  Direct Access ABPM is now available using standard referral forms, at WGH and Leith CTC.
-  ABPM allows better targeting of patients for anti-hypertensive therapy.
-  Use of Direct Access ABPM can reduce the need for referral to a hospital outpatient clinic.

References

1. Lothian Hypertension Guidelines 2001 (under review) http://lpcweb/elib/2_ClinicalPractice/2_Guidelines/Guidelines/Hypertension.pdf

Infertility Treatment in Lothian

The Lothian Joint Formulary (www.ljf.scot.nhs.uk) recommends that all infertility drugs, including clomifene citrate, should be *initiated* and *prescribed* by hospital specialists. See section 7.0.1(f) 'Treatment of disorders occurring in obstetrics and gynaecology - infertility'. The LJF lists the following drugs: clomifene citrate, chorionic gonadotrophin (Human Chorionic Gonadotrophin; HCG), follitropin alfa and beta (recombinant human follicle stimulating hormone) and tamoxifen.

GPs are sometimes asked to prescribe these drugs by patients who are receiving infertility treatment

privately. If a GP decides to prescribe for a patient who is attending a consultant for private infertility care, the cost has to be contained within the existing practice prescribing budget¹.

NHS Lothian guidelines² were set up to ensure that people in all Health Board areas get the same chance for funded treatment. The NHS is able to provide funding for some, but not all, people with fertility problems, who require treatment by assisted conception - that is in-vitro fertilisation (IVF) or intra-cytoplasmic sperm injection (ICSI) treatment.

NHS Lothian guidelines



The following criteria must be met to qualify for NHS funded treatment. The criteria were agreed by the Scottish Executive Health Department and all the Health Boards across Scotland. They are based on recommendations by an expert group, which included infertility specialists, nurses, GPs and patient support/consumer groups. The criteria seek to make the most efficient use of available resources by making sure that priority is given to people based on consideration of a number of factors, including the likely effectiveness of any treatment, the welfare of any children (existing or resulting from treatment) and equity.

NHS Lothian will only fund couples living in Lothian. The number of treatment cycles that are self funded are deducted from the 3 allocated NHS funded cycles (e.g. if a couple self funds 3 cycles while on the waiting list, they will not be eligible for NHS funded IVF/ICSI treatment).

The eligibility criteria are:

1. A **diagnosed cause** for infertility, for which assisted conception (IVF or ICSI) is an effective treatment. This means the doctor knows what causes the infertility and recommends assisted conception treatment. Usually, this will mean that the cause of infertility is tubal disease, endometriosis or due to male factor.
- or*
2. **Unexplained infertility** that has lasted for at least 3 years.
3. The female partner will be aged **37 years or under** when she gets to the top of the waiting list, i.e. less than age 38 at the commencement of treatment.
4. Neither partner has been sterilised.
5. No child living at home.
6. Less than 3 previous embryo transfers. This includes embryo transfers paid for privately.

Key messages:

-  **The Lothian Joint Formulary recommends that all infertility drugs should be initiated and prescribed by hospital specialists.**
-  **If a GP prescribes for a patient who is attending a consultant for private infertility care, the cost has to be contained within the existing practice prescribing budget.**

References

1. 'Who is eligible and who prescribes?', Prescribing bulletin, No.52, November 1997.
2. NHS Lothian Guidelines/Patient Information Sheet 'Assisted Conception Treatment. Eligibility for NHS Funding in Lothian', Edinburgh Fertility & Reproductive Endocrine Centre, Version 3, April 2003.

Further information on infertility treatment

- NICE Clinical Guideline 11, 'Fertility: assessment and treatment for people with fertility problems', developed by the National Collaborating Centre for Women's and Children's Health, February 2004. <http://www.nice.org.uk/pdf/CG011niceguideline.pdf>
- Expert Advisory Group on Infertility Services in Scotland (EAGISS) Report, 'Evidence and equity. A national service framework for the care of infertile couples in Scotland', April 1999. <http://www.show.scot.nhs.uk/publications/me/eagiss.pdf>

Venous Thromboembolism - New Guidance

NHS Lothian University Hospitals Division (LUHD) is launching a strategy for the management of venous thromboembolism (VTE).

The VTE Implementation Committee in collaboration with LUHD Drug and Therapeutics Committee have recently released a reference document that provides guidance on the diagnosis, treatment and prophylaxis of VTE. This can be accessed on the LUHD Intranet (Policies/Guidelines/Drug & Therapeutics). A quick reference 'Pocket Antithrombotic Guidance' will also be issued to clinical areas, doctors, nurses, midwives and pharmacists.

Educational sessions will be available daily for a week in January 2005 to all medical, nursing, midwifery and pharmacy staff at the Royal Infirmary of Edinburgh and Western General Hospital to facilitate the transition in line with recommendations from VTE Reference Document.

The need for a system to provide timely information to GPs and other primary care teams about warfarin at discharge is recognised and is currently under discussion with the view to having an agreed policy soon.

Key messages:

- Enoxaparin is the low molecular weight heparin of choice for prophylaxis and treatment of VTE.
- As from the 31 January 2005 all tinzaparin and standard heparin should be returned to Pharmacy.
- Standard heparin use will continue to be available where clinically appropriate.
- Guidelines must be available (unless the Pocket Antithrombotic Guidance meets patients' needs) in all clinical areas by 31 January 2005.

Doxazosin - the plain facts

A modified release version of doxazosin, Cardura XL[®], was introduced just prior to the patent expiry of the plain tablets. The pharmacokinetic profile of both doxazosin and doxazosin XL allows for once daily dosing. There appears to be no evidence of clinically relevant benefits of the XL form over the conventional, plain preparation.

Some patients may experience postural hypotension when first started on the plain preparation and it is best avoided in those with a history of such problems.

Comparative costs

Preparation	Strength	Quantity	Cost
doxazosin plain	4mg	28	£2.42
Cardura XL [®]	4mg	28	£6.33
Cardura XL [®]	8mg	28	£12.67

Key message:

- Consider reviewing all patients on modified release doxazosin.

Correspondence address:
Medicines Management Team
Stevenson House
555 Gorgie Road
Edinburgh
EH11 3LG Tel: 0131-537-8573

Editorial Team:

Dr David Crookes, Medicines Management Adviser
Ms Anne Gilchrist, MMT Pharmacist
Ms Sharon Hems, Formulary Pharmacist
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Dr Richard Williams, Prescribing Convener, GP Sub-Committee

Contact the editorial team at lif@lhb.scot.nhs.uk