Paediatric re:ACTION November 2000 No. 20

An occasional bulletin from the West Midlands Centre for Adverse Drug Reaction Reporting

This bulletin (complete with an index of all past issues) and other items of news about the Centre are available on the internet at http://csmwm.org

This is a special edition of re:Action about reactions which occur in children. The Committee on Safety of Medicines is keen that adverse drug reactions in children be reported, especially where the drugs have been used for an unlicensed indication or "off-label". The Yellow Card Scheme is confidential and extends to all licensed and unlicensed medicines, including herbal and alternative medicines.

WHAT TO REPORT

The reporting criteria for children remain the same as for the population generally, and at CSM West Midlands we welcome reports of serious or unusual suspected reactions to established drugs or vaccines, or any suspected reaction to black triangle drugs, unlicensed or herbal preparations. In particular we would welcome reports of any unusual reaction which occurred when a drug had been used for an unlicensed indication.

RECENT NEWS

Trent paediatric reporting scheme (ESOP 8th Annual Meeting 2000 abstracts: 66)

The "off label" use of medicines in children increases the need for effective pharmacovigilance in this area. A pilot study at the Paediatric Monitoring Centre in the Trent Region is underway, with the specific aim of stimulating reporting of suspected adverse drug reactions in children. After the first year there was an increase in the number of reports of reactions in children, although the proportion of reports of serious reactions decreased compared with the year before the study began.

Bother with bruxism. Methylphenidate and valproic acid interact (*Journal of Child and Adolescent Psychopharmacology* 2000; **10**: 39-43)

The use of methylphenidate (Ritalin®, Equasym®) in the treatment of Attention Deficit Hyperactivity Disorder (ADHD)is increasing. Epileptic children are possibly more likely to have ADHD, and they may be treated with methylphenidate and antiepileptic drugs in combination.

Gara and colleagues report two cases of children maintained on valproate who developed dyskinesia on starting methylphenidate treatment. In the first case, a 4-year old boy who had seizures from the age of four months and had been maintained on valproate acid 1000 mg daily for several years. Four hours after beginning methylphenidate 10 mg he developed head, neck, and side to side mouth movements. He showed bruxism with intermittent sucking clicks, agitation, and fidgeting of the hands. Symptoms subsided over the next 14 hours.

The second child, aged 6, was maintained on valproic acid for 9 months. Following a test dose of methylphenidate 5 mg she developed unusual tongue movements, and intermittent bruxism. These movements interfered with breathing at times, but settled 7 hours after the dose. In view of these cases the authors suggest caution when using methylphenidate and sodium valproate in combination.

The National Institute for Clinical Excellence (NICE - http://www.nice.org.uk) has recently issued guidance on the prescribing of methylphenidate for ADHD. NICE advise that methylphenidate should be used as part of a comprehensive treatment programme for children suffering from severe ADHD and that such children should receive regular monitoring. Trusts and Primary Care organisations developing shared care arrangements for the use of methylphenidate may wish to use the Yellow Card Scheme to report adverse reactions and drug interactions to this agent. Some adverse reactions reported to the CSM not listed in the Summary of Product characteristics are amnesia, thirst, stammer and spontaneous haemorrhage. Drug interactions of clinical significance should be reported in the same way as adverse drug reactions and spontaneous reports of interactions are a valuable way of discovering new interactions.

How many? (*Lancet* 2000; **355**: 1613-4)

Studies have estimated that in the general population 2-3% of all GP consultations are due to an adverse drug

reaction. A study recently completed among 29 family paediatricians, caring for 24 000 children up to the age of 14, in northern Italy estimated an incidence rate of 1.5% for all children. The rate was highest for those children under 1 year of age (3.4%) and dropped with age. They found that the drugs most commonly associated with an ADR were cephalosporin and macrolide antibiotics. The most common reactions were gastrointestinal or cutaneous. All the reactions detected in the study were non-serious.

Seizure from anaesthesia: remifentanil

(Anaesthesia 2000;55:489-518)

A 4 year old 19kg boy with no previous history of seizures or febrile convulsions suffered a probable seizure following administration of 1 microgram per kg of remifentanil, given before elective tonsillectomy. At the time of the seizure no other drugs had been administered. The tonic-clonic seizure lasted for 90 seconds and was associated with transient desaturation. Although this seizure could have been co-incidental remifentanil may have reduced the seizure threshold in a susceptible patient.

At CSM West Midlands we have received one previous report of agitation and pre-fit aura in an adult women.

Experience with remifentanil is limited in children and we ask you to be alert to and report all suspected adverse reactions.

Suspected reactions to vaccines

During the first ten months of this year CSM West Midlands has received over 1,200 reports to ADRs to vaccines used in children. The overwhelming majority of these were to meningitis C vaccine which is a black triangle **(▼)** drug. The most commonly reported reactions were nausea, headache, dizziness and faint. There were however 2 reports of suspected reactions with fatal outcomes following meningitis C vaccine, and 1 report with a fatal outcome following meningitis C vaccine, DTP, Hib, and polio vaccine. All fatal reports associated with meningitis C vaccination have been reviewed and the CSM concluded that there was no suggestion that the vaccine had caused any deaths All serious reactions, which include any which result in hospital admission, to established vaccines should be reported in the usual way.

REPORTING TO CSM West Midlands

We welcome Yellow Card reports on all adverse reactions to new (▼) drugs including vaccines and unlicensed herbal remedies, and on all serious or unusual reactions to well-established drugs.

Since the issue of the GMC's guidelines on patient confidentiality we no longer require the patient's name or date of birth. However, you should give sufficient details to enable **you** to identify the patient if we should need to contact you about the reaction. You can now **download a copy of the redesigned yellow card in Adobe PDF format** from our website (http://csmwm.org).

Please send reports to CSM West Midlands, Freepost SW2991, BIRMINGHAM, B18 7BR.

No stamp is needed. If you would like a supply of pre-addressed and reply-paid yellow cards, please contact the above address.

INTENSIVELY MONITORED [▼] **DRUGS** used in paediatric and neonatal medicine

Approved name	Trade name
beclomethasone dipropionate	Qvar®
epoprostenol	Flolan®
meningitis C vaccine	Menjugate®, Meningitec®, NeisVac-C™
mycophenolate mofetil	Cellcept®
oxcarbazepine	Trileptal®
palivizumab	Synagis®
tobramycin	Tobi®

The entire list of about 220 intensively monitored drugs can be obtained from the centre or on our website: http://csmwm.org. Please report **all** adverse reactions you suspect are due to intensively monitored drugs.

Please send any comments to: Dr R E Ferner at CSM West Midlands, or email: r.e.ferner@bham.ac.uk