

WAMSG
5th Annual Medication Safety Symposium

ADRs ain't just ADRs:
Action on Adverse Drug Reactions for Medication Safety

Program
14 July 2009

University Club
University of Western Australia, Crawley

Welcome

Welcome to the fifth symposium run by the Western Australian Medication Safety Group. We hope that you enjoy the day and gain useful knowledge to take back to your hospital or organisation.

In past symposia we have focused on reducing patient harm by reducing the potential for medication errors. Today our focus is on patient harm caused even when the right drug is given to the right patient, in the right dose, at the right time and via the right route. We are talking about adverse drug reactions (ADRs) and the steps that should be taken to reduce the risk of patient harm caused by ADRs.

We hope that this symposium will lead to practical improvements in patient safety. Once again, may we wish you an enjoyable and stimulating day.

With best wishes,



Christopher Beer
Chairman



Margherita Veroni
Project Coordinator

West Australian Medication Safety Group
14 July 2009

Western Australian Medication Safety Group

Dr Chris Beer, (Chairman)
Geriatrician and Clinical Pharmacologist
Royal Perth Hospital and UWA

Katherine Birkett
Clinical Nurse Manager
Royal Perth Hospital

Dr Rhonda Clifford
Senior Lecturer
UWA School of Pharmacy Practice

Dr Rowan Davidson
Chief Psychiatrist
WA Dept of Health

Kerry Fitzsimons
Senior Pharmacist
Fremantle Hospital

Violet Ford
Senior Clinical Pharmacist
Princess Margaret Hospital

Tanya Gawthorne
Manager, Office of Safety and Quality
WA Dept of Health

Dr Paul Jenkins
Professor and Consultant Physician
Royal Perth Hospital and UWA

Dr Rob Kirk
Medical Director
WACHS-Wheatbelt

Dr Stephen Lim
Principal Pharmacist
Armadale Health Service

Helen Lovitt
Senior Pharmacist
eHealthWA

David McKnight
Deputy Chief Pharmacist
St John of God Hospital, Subiaco

Dr Mark Newman
Clinical Director
Safety and Quality Unit, SCGH

Nancy Pierce
Health Consumer

David Lyon
Executive Officer
Western Australian Therapeutics Advisory Group

Dr Margherita Veroni
Project Coordinator
Western Australian Medication Safety Group

Program

8:00 REGISTRATION / COFFEE / TEA

SESSION 1

Chairman: Dr Christopher Beer, Chairman WAMSG

- 8:30 WELCOME
Dr Peter Flett
Director General, WA Department of Health
- 8:45 THE PHARMACOGENETICS OF DRUG HYPERSENSITIVITY:
PERSONALISING MEDICINE & PREDICTING THE UNPREDICTABLE?
Elizabeth Phillips, MD, FRCPC
*Professor & Director, Centre for Clinical Pharmacology & Infectious Diseases,
Murdoch University and Consultant, Royal Perth Hospital & Sir Charles Gairdner
Hospital*
- 9:45 ADVERSE DRUG REACTION REPORTING IN AUSTRALIA
Dr Jane Cook
Senior Medical Officer, Office of Medicines Safety Monitoring, TGA

10:15 DISCUSSION

10:30 MORNING TEA

SESSION 2

Chairman: David McKnight

- 11:00 ADR AIN'T ADR
Dr Stephen Lim
Armadale Health Service (AHS)
- 11:10 CALCIUM ANTAGONISTS-INDUCED LOWER URINARY TRACT SYMPTOMS
Elsamaul Elhebir
School of Pharmacy, Curtin University of Technology
- 11:20 CLOZAPINE-THE GOOD, THE BAD, THE UGLY
Diana Mukasa
Graylands Hospital Pharmacy
- 11:30 ADRS - A PAIN THE BACK
Karen Flounders
Thrombosis Unit, Royal Perth Hospital
- 11:40 RECOGNISING, RECORDING, AND REDUCING ADVERSE DRUG REACTIONS
Tamara Lebedevs
King Edward Memorial Hospital
- 11:50 PUTTING ADR DOCUMENTATION INTO THE SPOTLIGHT
Kerry Fitzsimons
Fremantle Hospital and Health Service
- 12:00 QUESTION / DISCUSSION
- 12:15 COMORBIDITY PREDICTS REPEAT HOSPITALISATION FOR ADVERSE DRUG
REACTIONS IN OLDER ADULTS
Dr Min Zhang
School of Population Health, The University of Western Australia

12:30 LUNCH

SESSION 3
WORKSHOPS

AVOIDING AND MANAGING ANAPHYLAXIS "AT HOME"

Facilitators: Robyn Kovac and Ellen MacDonald

Auditorium

DEFINING CLINICALLY IMPORTANT ADRS

Facilitators: Jane Cook and David Bruce

Seminar Room 1

PREVENTING ADRS IN THE ERA OF PHARMACOGENOMICS

Facilitators: Elizabeth Philips and Janakan Krishnarajah

Seminar Room 2

13:30 WORKSHOPS - ROUND 1

14:15 WORKSHOPS - ROUND 2

15:00

AFTERNOON TEA

SESSION 4

Chairman: Helen Lovitt

15:30 WORKSHOP WRAP-UP

16:00 A BRIGHTER FUTURE? AN ELECTRONIC NIMC

Dr David Glance

UWA Centre for Software Practice

16:20 CLOSING

16:30

CLOSE

Invited Speakers

Elizabeth J. Phillips

Dr. Phillips has been Professor of Pharmacology and Director of the Centre for Clinical Pharmacology & Infectious Diseases at Murdoch University, Perth Western Australia since 2006. She is currently a consultant in the Departments of Clinical Immunology at the two major teaching and tertiary care hospitals in Perth, Royal Perth Hospital and Sir Charles Gairdner Hospital where she treats patients with HIV. In addition she is appointed as a consultant in Infectious Diseases at Sir Charles Gairdner Hospital and runs a clinical program in Drug Hypersensitivity across sites and disciplines. She is currently involved in teaching at the graduate and undergraduate level and is a member of drug evaluation committees.

Dr. Phillips obtained her doctorate of medicine (MD) from the University of Alberta in 1989. She did post-graduate training in internal medicine at the University of Toronto, where she obtained internal medicine qualifications in Infectious Diseases (1995) and Clinical Pharmacology (1993) and pathology qualifications in Medical Microbiology (1996) with the Royal College of Physicians & Surgeons of Canada. She did a research fellowship in Clinical Pharmacology at the University of Toronto from 1998-1999. Before coming to Australia she was a consultant & Clinician Scientist in the Divisions of Infectious Diseases and Clinical Pharmacology at Sunnybrook Health Sciences Centre (Toronto) and Assistant Professor at the University of Toronto, Faculty of Medicine & Pharmacology (1999-2004) and St. Paul's Hospital (Vancouver) from 2004-2006 where she was also Associate Professor, University of British Columbia. Through these appointments she also held numerous administrative positions including Head of Clinical Pharmacology (Sunnybrook hospital), Head of Clinical Pharmacology/Clinical Systems, British Columbia Centre for Excellence In HIV/AIDS. St. Pauls' Hospital, Vancouver and was a long-standing member on hospital ethics committees, scientific advisory committees and pharmacy and therapeutics committees.

Dr. Phillips has had long-standing research and clinical interests in HIV Drug Safety and Pharmacology and previously directed such programs in Canada where she was successful in securing research funding in the form of personal career support and project grant funding. She was the recipient of the Young Investigator Award from the Canadian Infectious Disease Society (2000) and the Canadian Society for Clinical Pharmacology (2004). Her research in abacavir hypersensitivity has involved the application of genetic screening to clinical practice and the use of cutaneous patch testing to aid in hypersensitivity case ascertainment and the clinical study of genetic testing which has now been applied to major clinical trials. She continues active research programs in the pharmacogenetics of adverse drug events as well as the immunogenetic basis of abacavir hypersensitivity and other drug related hypersensitivities.

Jane Cook

Dr Jane Cook is the Senior Medical Officer in Office of Medicines Safety Monitoring (OMSM), having joined in early February this year. OMSM is responsible for monitoring medicine safety in Australia and collects and evaluates all adverse drug reactions reported to the Therapeutic Goods Administration (TGA). Jane has also been responsible for the implementation of risk management plan assessment of high-risk medications seeking registration in Australia. Risk management plans identify potential safety concerns related to a new medicine and how they will be managed in the post marketing period and whether activities such as healthcare professional education, patient registries or further studies are required to minimise potential adverse outcomes for patients.

Prior to this she was the Senior Medical Adviser with General Practice Education and Training (GPET) an organisation that oversees the vocational training of doctors for General Practice in Australia and worked as the Chief Executive Officer of FPWA (a non government organisation providing sexual health services in Western Australia)

From 1999 to 2006 she was the Senior Medical Adviser with the Medicare Benefits Branch of the Department of Health and Ageing. Her major role was managing the inclusion of new technologies and procedures into the Medicare Benefits Schedule (MBS) and support for the Medical Services Advisory Committee (MSAC) in their assessment of new technologies; and the review of the Medicare Benefit Schedule (MBS). Other roles in the Department were the implementation of the Enhanced Primary Care and Chronic Diseases Initiatives.

Prior to joining the Department of Health and Ageing, Dr Cook worked as a general practitioner in Perth, a medical educator with the RACGP Training Program and as an Occupational Physician. She continues to practice as a General Practitioner in Canberra.

David Bruce

Dr Bruce is a Professor of medicine at UWA and a consultant geriatrician at Fremantle Hospital. He has a longstanding interest in the problem of drug related iatrogenic disease in the elderly and was the inaugural chairperson first of the Fremantle Hospital Medication Management Review Group (MMRG) and then the WAMSG.

David Glance

Dr David Glance is Director of the UWA Centre for Software Practice (CSP), a UWA research centre. Originally a physiologist working in the area of vascular control mechanisms in pregnancy, Dr Glance subsequently worked in the software industry for over 20 years before spending the last 6 years at UWA. The UWA CSP has developed the software MMEEx which has been used to provide electronic patient management and secure messaging within WA Country Health Services, the Aboriginal Medical Services in the Kimberley and private practice GPs, Specialists and Allied Health Providers throughout WA. Recently the UWA CSP has signed a collaborative development agreement with the Department of Health WA to deliver more functionality based on MMEEx.

Ellen MacDonald

Ellen is currently Clinical Nurse Manager of Emergency Research within the Centre for Clinical Research in Emergency Medicine at Royal Perth Hospital. Since qualifying in 1999 Ellen has worked as a nurse in the Critical Care setting primarily in Emergency Medicine but also in Acute Medicine / High Dependency. Ellen was involved in coordinating a National study in Anaphylaxis which is the first of it's kind in Australia.

Janakan Krishnarajah

Janakan is a Senior Registrar and trainee Clinical Pharmacologist at Royal Perth Hospital.

Robyn Kovac

Robyn is currently Nursing Director for Cancer & Neurosciences Division at Royal Perth Hospital. Since training in Qld in 1984 as a Registered Nurse, Robyn has spent her career in WA predominantly in the field of Haematology/Oncology. Initially at Fremantle Hospital, moving to Princess Margaret Hospital where she got her first taste of Bone Marrow Transplantation, a stint doing agency and then onto Royal Perth Hospital (in 1990). Robyn did the first home based bone marrow transplant at RPH in 1994, this one off case lead to a pilot programme that lead to the DBMS (Domiciliary Bone Marrow Service) has now been successfully running for over 14 years. Initial home anaphylaxis protocols were based around the ability to give platelets at home and have evolved from there.

11:10 CALCIUM ANTAGONISTS-INDUCED LOWER URINARY TRACT SYMPTOMS

Elsamaul Elhebir¹, Jeff Hughes¹, Samantha Hilmi²

(1) School of Pharmacy, Curtin University of Technology;

(2) Pharmacy Department, Royal Perth Hospital

Introduction: Lower urinary tract symptoms (LUTS) have been reported amongst the side effects of calcium antagonists (CA). CAs act on the bladder by affecting the ability of the detrusor muscle to create enough contractile force to overcome obstruction to normal voiding. The aim of this study was to determine the relationship between CA use and LUTS in medical inpatients.

Method: The study involved medical patients aged ≥40 years admitted to Royal Perth Hospital. After obtaining a written informed consent, the primary investigator interviewed participants assessing their LUTS using the International Prostate Symptoms Score (IPSS) questionnaire.

Results/Discussion: A total of 278 patients (151 males and 127 females, mean age 72.1±13.7 years) agreed to participate in this study. About one third of the patients were using CAs. LUTS were categorised based on IPSS scores as mild (0-7), moderate (7.5-19), and severe (19.5-35). After adjusting for other risk factors, CA-users (other than felodipine/lercanidipine) were more likely to suffer from severe and moderate/severe-symptoms (Table). Further, both male and female CA-users were three times more likely to be on alpha-blockers than non-users (p=0.0001). Male CA-users were two times more likely to have undergone urinary tract-related surgery (p=0.07) while female CA-users have nine times more urinary tract-related surgery (p=0.029).

Conclusion: These results demonstrate a significant association between CAs use and severity of LUTS, although it does not appear to be a class effect. CA-users are more likely to have medical or surgical treatment for LUTS.

Table	Odds Ratio	
	Severe-Symptoms	Moderate/Severe-Symptoms
Amlodipine/Nifedipine	M: 7.35(CI:2.43-22.26)	M: 17.43(CI:2.26-134.39)
	F: 10.5(CI:2.23-49.19)	
Diltiazem/Verapamil	M: 12.45(CI:1.57-98.63)	F: 47.8(CI:6.22-367.37)
	F: 7.75(CI:0.94-63.94)	
Felodipine/Lercanidipine	None	M: 0.95(CI:0.24-3.84)
		F: 1.21(CI:0.41-3.58)

