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## **ADVERSE DRUG REACTION REPORTS: SEPT - DEC 2015**

A total of 784 Adverse Drug Reactions (ADRs) were reported or detected by the Department of Clinical Pharmacy during September to December 2015. The following are some of the suspected ADRs that were either reported to or detected by the Department of Clinical Pharmacy. In most of the cases there was a change in drug therapy e.g. cessation of suspected drug or reduction in dose, and/or either specific or symptomatic treatment for the suspected ADR.

Galactorrhoea Amisulpride Amlodipine + Hydrochlorthiazide ...... **Bullous Pemphigoid** Clonazepam Dyspepsia Escitalopram + Clonazepam Decreased Libido Levocetrizine **Erectile Dysfunction** Levodopa + Carbidopa Menstrual Irregulation Levothyroxine **Psoriasis** Lidocaine Petechiae Methoxsalen Photosensitivity Metoclopramide Chorea Paliperidone Extrapyramidal Side Effect Polymyxin B **Burning Sensation** ........ Sildenafil **Epistaxis** Succinyl Choline Jaw Rigidity Zolpidem Altered Behaviuor .........

# Sildenafil induced Epistaxis

Severe epistaxis particularly affects the people with hypertension or clotting disorders and those taking medications such as aspirin, warfarin and sildenafil. Nasal congestion is also listed as a side-effect of sildenafil and it seen in 4% of patients. Venous engorgement due to sildenafil is believed to be a causal factor in the severe epistaxis after sexual activity. There has been no obvious increase in epistaxis since the introduction of sildenafil; this effect, however, might be under-reported because of the disinclination of most patients to discuss sexual matters in public, especially those relating to sexual dysfunction. Withdrawing sildenafil and symptomatic treatment is the best management for epistaxis.

# Paliperidone induced Extrapyramidal Symptoms

As with other atypical antipsychotics, Paliperidone exhibits a high 5HT2A:D2 affinity ratio. It also has binding activity as an antagonist at  $\alpha$ 1-and  $\alpha$ 2 adrenergic receptors and H1 histaminergic receptors, but has virtually no affinity for cholinergic receptors. Incidence of extrapyramidal symptoms (EPSs) in studies with paliperidone was low; these symptoms occurred in 5% of patients on paliperidone in the dosage 3 mg/day and in 10% of patients in the dosages 9 and 15 mg/day. Overall incidence of EPSs for paliperidone was up to 40%. Managing EPSs can be challenging even if a screening tool is used, because the interventions must be based on the specific category of EPSs being displayed. Most EPSs will subside with discontinuation of the suspected antipsychotic medications.

# Zolpidem induced Altered Behaviour

There are several case reports of zolpidem causing psychotic reactions in patients with no history of psychosis. There were cases in which zolpidem was implicated in psychotic reactions characterized by auditory and visual hallucinations as well as delusional thinking. Symptoms resolved with the discontinuation of zolpidem use. The reaction appears to be dose dependent, and the adverse event resolved fairly quickly upon zolpidem discontinuation. Zolpidem should be used at the lowest effective dose for the least amount of time as necessary. Female patients may possibly require smaller doses.

We encourage you to report all suspected adverse drug reactions to Department of Clinical Pharmacy. Adverse drug reaction reporting forms are available at all nursing stations. Alternatively you may call Department of Clinical Pharmacy on 2335577 or 2335555; Extn. 5577 or SMS to 07411137840. (Format: ADR/IP or OP Number/ Name of the patient/ Ward)

# DRUGS APPROVED BY US FDA: SEPT - DEC 2015

DRUG	BRAND	USFDA: SEPT - DEC 2015			
Ditto		Vascular diseases			
Sebelipase alfa	Kanuma	For the treatment of Lysosomal Acid Lipase (LAL) deficiency			
Selexipag	Uptravi	For the treatment of pulmonary arterial hypertension			
	Dermatology				
Calcipotriene and	Enstilar	For the treatment of psoriasis			
betamethasone dipropionate					
	Endo	ocrinology			
Insulin degludec injection	Tresiba	For glycemic control in adults with diabetes mellitus			
	Gene	tic Disease			
Asfotase alfa Strensiq For the treatment of hypophosphatasia					
		matology			
Recombinant Factor VIII	Nuwiq	For the prophylaxis and treatment of hemophilia A			
Idarucizumab	Praxbind	For the reversal of the anticoagulant effects of dabigatran			
Patiromer	Veltassa	For the treatment of hyperkalemia			
m		infectious Diseases			
Trivalent influenza vaccine	Fluad	For the prevention of influenza A and B			
Elvitegravir, cobicistat, emtricitabine, and tenofovir alafenamide	Genvoya	For the treatment of HIV-1 infection			
	Musci	uloskeletal			
Meloxicam	Vivlodex	For the management of osteoarthritis pain			
	Nep	phrology			
Lesinurad	Zurampic	For the treatment of hyperuricemia associated with gout			
	Ne	urology			
Buprenorphine	Belbuca	For the management of severe pain			
Cariprazine	Vraylar	For the treatment of schizophrenia and bipolar			
		disorder			
		Oncology			
Alectinib	Alecensa	For the treatment of ALK-positive, metastatic non-			
	0 . 11:	small cell lung cancer			
Cobimetinib	Cotellic	For the treatment of advanced melanoma			
Daratumumab	Darzalex	For the treatment of multiple myeloma			
Elotuzumab	Empliciti	For the treatment of patients with multiple myeloma who have received prior therapies			
Talimogene laherparepvec	Imlygic	For the treatment of unresectable recurrent melanoma			
Trifluridine and tipiracil	Lonsurf	For the treatment of metastatic colorectal cancer			
Ixazomib	Ninlaro	For the treatment of multiple myeloma			
Irinotecan liposome	Onivyde	For the treatment of metastatic pancreatic cancer			
injection		following gemcitabine-based therapy			
Necitumumab	Portrazza	For the treatment of metastatic squamous non-small cell			
D. Landton, t	X71 ·	lung cancer			
Rolapitant	Varubi	For the prevention of delayed nausea and vomiting associated with chemotherapy			
Trabectedin	Yondelis	For the treatment of liposarcoma or leiomyosarcoma			
Habetteum		logy/Toxicology			
Sugammadex	Bridion	For the reversal of neuromuscular blockade induced by			
Jugammauex	Briuton	rocuronium and vecuronium in adults undergoing surgery			
Uridine triacetate	Vistogard	For the emergency treatment of patients with a			
oriume triacetate	Vistogaru	fluorouracil or capecitabine overdose			
	Psychiatr	ry/Psychology			
Aripiprazole lauroxil	Aristada	For the treatment of schizophrenia			
extended-release injectable	30.000				
Cariprazine	Vraylar	For the treatment of schizophrenia and bipolar disorder			
•		espiratory Diseases			
Mepolizumab	Nucala	For the treatment of severe asthma with an eosinophilic			
•		phenotype			
Osimertinib	Tagrisso	For the treatment of EGFR T790M mutation positive non-			
		small cell lung cancer			
Indacaterol and	Utibron	For the long term, maintenance treatment of airflow			
glycopyrrolate	Neohaler	obstruction in patients with COPD			
	U	rology			
Uridine triacetate Xuriden For the treatment of hereditary orotic aciduria					
deference: https://www.centerwatch.com/drug-information/fda-approved-drugs/year/2015					

Reference: https://www.centerwatch.com/drug-information/fda-approved-drugs/year/2015

## DRUGS APPROVED BY CDSCO, INDIA: SEPT - DEC 2015

DRUG	STRENGTH	INDICATION	
Atosiban aceate	6.75mg/0.9ml	Delay imminent pre-term birth in pregnant adult	
	injection	women with:	
		> regular uterine contractions of at least 30 Seconds	
		duration at the rate of $\geq 4$ per 30 minutes	
		> a cervical dilation of 1 to 3 cm (0-3 for	
		nulliparous) and effacement of ≥50%	
		➤ a gestational age from 24 until 33	
		completed weeks a normal foetal heart	
		rate	
Ibrutinib	140mg Hard	For the treatment of adult patients with:	
	gelatin Capsule	> mantle cell lymphoma (MCL) who have received at	
		least one prior therapy	
		> chronic lymphocytic leukemia (CLL) who have	
		received at least one prior therapy	
		➤ chronic lymphocytic leukemia with 17p detection	
Ledipasvir + Sofosbuvir	90mg + 400mg	For the treatment of chronic hepatitis C (CHC)	
	Tablet	genotype 1 infection in adults	
Daclatasvir	30mg/60mg	For use with Sofosbuvir for the treatment of patient	
Dihydrochloride	Tablet	with chronic hepatitis C virus (HCV) genotype 3	
		infection	
Enzalutamide	40mg soft	For the treatment of adults with metastatic castration	
	Capsule	resistant prostate cancer whose disease has progessed	
		on or after Docetaxel therapy	

Reference: <a href="http://www.cdsco.nic.in/forms/list.aspx?lid=2034&Id=11">http://www.cdsco.nic.in/forms/list.aspx?lid=2034&Id=11</a>

#### First Reversal Agent for the Non-vitamin K Antagonist Oral Anticoagulant

The U.S. Food and Drug Administration granted accelerated approval to Praxbind (idarucizumab) for use in patients who are taking the anticoagulant Pradaxa (dabigatran) during emergency situations when there is a need to reverse Pradaxa's blood thinning effects.

The FDA approved Pradaxa in 2010 to prevent stroke and systemic blood clots in patients with atrial fibrillation, as well as for the treatment and prevention of deep venous thrombosis and pulmonary embolism. Praxbind is the first reversal agent approved specifically for Pradaxa and works by binding to the drug compound to neutralize its effect. Praxbind solution is for intravenous injection.

The approval was based on three randomized, placebo-controlled trials enrolling a total of 283 healthy volunteers who received either dabigatran and idarucizumab or dabigatran and placebo. The primary endpoint in healthy volunteer trial was the reduction of unbound dabigatran to undetectable levels after the administration of 5g idarucizumab. In the healthy volunteers who were given Praxbind, there was an immediate reduction in the amount of Pradaxa in participants' blood that lasted for a period of at least 24 hours. Headache was the most common adverse event reported in more than 5% of healthy volunteers.

These trials are supported by an ongoing open-label trial in which data from 123 patients receiving dabigatran who had life-threatening or uncontrolled bleeding, or who required emergency surgery/urgent procedures was available for evaluation. This open-label trial continues to enroll and follow patients. The primary endpoint is the reversal of dabigatran's anticoagulant effect (measured by ecarin clotting time or dilute thrombin time) in the first four hours after administration of 5g idarucizumab. In these 123 patients, the anticoagulant effect of dabigatran was completely reversed in more than 89% of patients within four hours of receiving idarucizumab. Between 12 and 24 hours after idarucizumab administration, elevated coagulation parameters have been observed in a limited number of patients. In this patient trial, adverse events reported in more than 5% of patients were hypokalemia, delirium, constipation, pyrexia and pneumonia.

The recommended dose for idarucizumab is 5g (2.5g per vial) administered intravenously as two consecutive 2.5g infusions or bolus injection by injecting both vials consecutively one after another via syringe.

*Reference*: Pollack CV Jr, Reilly PA, Eikelboom J, Glund S, Verhamme P, Bernstein RA, Dubiel R, et al. Idarucizumab for Dabigatran Reversal. N Engl J Med 2015;373(6):511-20

## Will Rosiglitazone Back in Indian Market?

The US Food and Drug Administration (FDA) has removed the final remaining restrictions placed on the use of rosiglitazone.

In 2013, the FDA lifted restrictions on the prescribing and use of the diabetes drug rosiglitazone (Avandia, Avandamet, Avandaryl) on the basis of data, including from the Rosiglitazone Evaluated for Cardiovascular Outcomes and Regulation of Glycemia in Diabetes (RECORD) trial, that demonstrated no elevated cardiovascular risk.

Now, the agency is lifted entirely the risk evaluation and mitigation strategy (REMS) for rosiglitazone-containing type 2 diabetes medicines, which had included a requirement for the drug manufacturers to provide educational training to healthcare professionals about the current state of knowledge regarding the heart risks of rosiglitazone medicines. The

manufacturers have now fulfilled these requirements.

The REMS was initially imposed in 2010. It included a requirement for special certification for healthcare providers who prescribe rosiglitazone. Only specially certified pharmacies could dispense it, and only patients who were already taking it before the restrictions or new patients who could not use any other glucose-lowering medications were eligible to take it.

Those moves came after publication of a meta-analysis in 2007 that raised concern about a possible increased cardiovascular risk. However, the RECORD trial and its subsequent readjudication were reviewed by two FDA advisory panels in June 2013. Of the 26 members of the combined panel, 13 members voted to keep rosiglitazone on the market and ease up on the restrictions.

FDA continued monitoring these medicines and identified no new pertinent safety information. As a result, FDA determined the REMS is no longer necessary to ensure that the benefits of rosiglitazone medicines outweigh their risks.

The Government of India banned rosiglitazone in December 2013, as it was found to be a major cause for heart failure and heart attacks in diabetics

and has proved to be fatal for thousands of patients in India. We have to wait for the steps to be taken by Government of India on rosiglitazone after FDA taken out REMS on rosiglitazone recently and mentioned benefits outweighs the risks.

Reference: http://www.fda.gov/Safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm477601.htm

# **DEPARTMENT ACTIVITIES**

# Pharmacy Practice Module -Advanced Learning Series 7 (Repeat) "Oncology"

Indian Association of Colleges of Pharmacy (IACP) and JSS College of Pharmacy, Mysuru jointly organized Pharmacy Practice Module Advanced Learning Series 7 - (Repeat) on 'Oncology' during  $26^{\text{th}}$ - $28^{\text{th}}$  September 2015 at Sri Rajendra Centenary Auditorium, JSS Hospital, Mysuru. The objective of this program was to enhance the understanding of clinical pharmacy services and promote quality pharmacy practice in oncology area. The program was inaugurated by Dr. B. Suresh, Vice Chancellor, JSS University, Mysuru and President, Pharmacy Council of India on Saturday,  $26^{\text{th}}$  September 2015.

Dr. G. Parthasarathi, Dean, Faculty of Pharmacy, JSS University welcomed gathering and briefed about the objective of the program. Dr. B. Suresh, President of the inaugural function, addressed the gathering about current challenges in developing pharmacy practice in India and possible strategies to overcome those challenges. Also, in his presidential address, he delivered motivational words for students and budding pharmacists to help them understanding current scenarios in Indian health care system and how pharmacists, as an healthcare provider, can fit in to various facets of healthcare systems and contribute to the society. Dr. Krishna Kumar, Professor, College of Pharmacy, Howard University, Washington DC, USA was the chief guest of this function. In his address he highlighted the importance of pharmacists' role in health care system. This occasion was graced with Dr. H. Basavanagowdappa, Dean, Faculty of Medicine, JSS University and Dr. M.D. Ravi, Director, JSS Hospital, Dr. B. Jayakar, Principal, Vinayaka Mission College of Pharmacy & Secretary, IACP and Dr. B. Manjunatha, Registrar, JSS University. Dr. M. Ramesh, Head,

Department of Pharmacy Practice, JSS College of Pharmacy, Mysuru proposed vote of thanks.



From left to right: Dr. B Jayakar, Dr. G. Parthasarathi, Dr. B Suresh, Dr. Regan M Healy, Dr. Krishna Kumar, Dr. Keith Hecht, Dr. M Ramesh, Dr. B Manjunatha, Dr. M D Ravi and Dr. H Basavana Gowdappa

Prof. Keith A. Hecht, Department of Pharmacy Practice at Southern Illinois University Edwardsville (SIUE), IL, USA and Dr. Regan M. Healy, Hematology Oncology Clinical Pharmacist, University of Utah, USA and Dr. Krishna Kumar were resource persons for this workshop. More than 280 delegates [Pharm.D (Doctor of Pharmacy) students and pharmacy practice faculties] from more than 35 different pharmacy institutions located across India participated in this event.

## Guest Lecture by Dr. G. P. Mohanta

The Department of Pharmacy Practice organised a guest lecture on the topic 'Pharmacoeconomics in Public Health' by Dr. G. P. Mohanta, Professor and Head, Department of Pharmacy Practice, Annmalai University, Chidambaram on 19th November 2015. During his talk, Dr. Mohanta has highlighted the importance and applications of Pharmacoeconomics methods in taking decisions in healthcare and stressed on the need for Pharmacoeconomics research in hospital and community settings. During his talk, he briefed about spending on health care expenditure in different countries of the world. Also, he stressed on applications of various Pharmacoeconomics methods in improving public health. Fifth and Sixth Pharm.D students, Post Graduate students, research scholars and staff of Dept. Pharmacy Practice attended the lecture.



Dr. G. P. Mohanta delivering the lecture

#### Guest Lecture by Dr. Pinaki Ghosh

Department of Pharmacy Practice, JSS College of Pharmacy, Mysuru in association with Indian Pharmaceutical Association Mysuru Branch had organized a Guest Lecture on "Pharmacoeconomics Evaluations & Modelling - An Academic Perspective" on 5th September 2015. A lecture was delivered by Dr. Pinaki Ghosh, Senior Scientist and Pharmacoeconomic Model Developer, Department of Health Economics & Outcome Research, Novartis India Pvt. Ltd, Hyderabad at Lecture Hall of JSS Hospital, Mysuru. He discussed about basic concepts, need and scope of Pharmacoeconomics. In his talk, he covered various aspects of Pharmacoeconomics including types of Pharmacoeconomic modelling, common software to be used for Pharmacoeconomic evaluations and modelling. This lecture was attended by all the fifth and sixth year Pharm.D students and M.Pharm Pharmacy Practice students and staff. Students had an opportunity to discuss about career opportunities in health economics. This lecture provided lot of motivation to the students and staff members to

further explore on research and practice in the area of Pharmacoeconmics.



Dr. Pinaki Ghosh delivering the lecturer

#### Guest Lecture by Dr. A. J. Prashanth

Mr. A. J. Prashanth, Chief Pharmacist-Retail Division, Al-Hilal Pharma Services & Trading Company, Doha, Qatar delivered a guest lecture on "Community Pharmacy Practice and Opportunities in Middle East" on 21st September 2015 to Pharm.D students. In his lecture, he described the health care system at both government and private settings and highligted the strengths and weaknesses of both health care systems. Students had a good opportunity to understand various roles and responsibilities of community pharmacists in middle east. Mr. A. J. Prashanth was very kind to discuss the process of registration for foreign graduate to practice in community, hospital and clinical pharmacy settings. Students had very good interaction with him on scope of pharmacists in middle east. This lecture motivated students to explore more opportunities in community pharmacy area. Dr. M. Ramesh, Professor & Head of the Department thanked Mr. A.J. Prashanth for sharing his knowledge and enlightening the students on community pharmacy practice especially in middle east.



Dr. A. J. Prashanth delivering the lecture

# Faculty Attended to 9th Asian Conference on Pharmacoepidemiology held at Bangkok, Thailand

The 9<sup>th</sup> Asian Conference on Pharmacoepidemiology (ACPE) was held at Golden Tulip Sovereign Hotel, Bangkok, Thailand from 14<sup>th</sup>-16<sup>th</sup> November 2015. Dr. Ramesh Adepu, Professor and Mr. Krishna Undela, Lecturer, Department of Pharmacy Practice, JSS College of Pharmacy, JSS University, Mysuru attended this conference.

There were workshops held on 14<sup>th</sup> on introductory and advanced Pharmacoepidemiological aspects. Data sources for Pharma coepidemiological research, cohort and case-control study designs, role of clinical trials, drug utilization research and therapeutic risk management in Pharmacoepidemiology were the topics covered in introductory program. Pharmacogenomics, confounding and bias, signal detection, evaluation of risk management programs, comparative effectiveness and benefit risk assessment and vaccine safety assessment were the topics covered in advanced program. Dr. Ramesh Adepu attended to advanced program and Mr. Krishna Undela attended introductory program. These workshops were very useful to strengthen the fundamentals of the mentioned subjects and will be useful for teaching and training for Pharm.D and M.Pharm students.

During two days conference (15<sup>th</sup>-16<sup>th</sup> November 2015) there were few plenary sessions on Pharmacoepidemiology in Asia: experiences from USA and Europe, observational studies for drug safety and patient reported outcomes. There were several symposiums on various aspects of Pharmacoepidemiology. There was a great opportunity to participate in many oral contributed paper sessions in area diabetes and cancer, cardiovascular and anticoagulation issues, drug outcome issues, methodology and signal detection and adverse drug reactions.

Dr. Ramesh Adepu presented a paper entitled "Assessment of Patient Reporting of ADRs at a South Indian Tertiary Care Teaching Hospital" and

Mr. Krishna Undela presented a paper on "Availability of essential medicines for chronic diseases in older people in the Asia Pacific Region" and "Fall related hospital admissions among elderly: a prospective observational study in a South Indian tertiary care teaching hospital" during poster session on 15th November 2015.

Dr. Ramesh Adepu and Mr. Krishna Undela were awarded with International Society for Pharmacoepidemiology (ISPE) Scholarship to participate in this conference.



From left to right: Mr. Varun Talla, Dr. Ramesh Adepu, Mr. Pavan Adepu, Mr. Krishna Undela

## **Health Screening Service Camp**

As part of National Pharmacy Week celebrations, JSS College of Pharmacy, Mysuru in association with Indian Pharmaceutical Association Mysuru Branch organised Health Screening Services camp on 25<sup>th</sup> November 2015 for the benefit of general public. The camp was conducted in two different locations of Mysuru city (Balabhavan and Chamundi Vihar Stadium). During the camp, Blood Glucose and Blood Pressure were measured. About 250 people were screened and benefited from the camp. During the camp, five cases of diabetics and seven cases of hypertension were detected. Two staff members and 10 Post Graduate students and research scholars of the Department of Pharmacy Practice involved in the conduct of the camp.



Students at health screening camp

#### **Poison Information Service Awareness and Education**

The Poison Information Centre (PIC) located at Department of Clinical Pharmacy, JSS Hospital, Mysuru conducted a Poison Information Awareness Program in Sri Shivarathreeshwara Nagar, a residential area of Mysuru District on 25<sup>th</sup> November 2015. The aim of the program was to create awareness among the general public about the first aid measures in case of poisoning. During the awareness program, the local residents were educated about the first aid

measures they must follow in case of the accidental poisoning. In addition, they were made aware of the facility and services available at Poison Information Centre located at JSS Hospital, Mysuru. Also they were educated about the safe use of medications in the elderly as well as pediatric populations, and advised them to percolate the information to the relatives and the close ones in order to prevent accidental poisonings due to medications in elderly and pediatric population. During the awareness and education program, general public was provided with various kinds of information leaflets. The leaflet includes the education material on safe use of medications in elderly and pediatric patients. Posters on Poison Information Centre with its Toll Free number were displayed at various places with the aim of creating awareness amongst general public. Local population visiting public parks were edu-cated and were made aware of the Toll Free Poison Information Helpline number available at Poison Information Centre. A healthy participation was seen from the people of from that particular locality throughout the campaign.



Research Scholar providing poison information awareness

#### Visit of Students from Southern Illinois University, Edwardsville, USA

Mallory Adams, Whitney Miller and Maryam Molki, Pharm.D students from Southern Illinois University, Edwardsville, USA visited Department of Pharmacy Practice, JSS College of Pharmacy, Mysuru and underwent clinical rotation at the practice site (JSS Hospital. Mysuru) from 17<sup>th</sup> Oct. 2015 to 6th Nov. 2015 as part of their advanced pharmacy practice experience. The objectives of this clinical rotation were to understand Indian health care system and gain an experience in the practice of pharmacy in different medical specialities especially on infectious diseases.

The clinical rotation was well structured to give them an adequate exposure to different clinical specialities, drug distribution system in the hospital pharmacy, patient counselling and education services, clinical pharmacy services, ambulatory care pharmacy services, exposure to drug safety and vaccine safety reporting programs and research activities. These students had opportunity to attend ward rounds in General Medicine, Paediatrics and Cardiology and to understand the scope of clinical pharmacy practice in those wards. They were briefed on inpatient care, process of prescription processing and inpatient drug distribution system, process of safety reporting and monitoring for inpatients ADRs and patient education during all the clinical rotations. Students from SIUE had opportunity to understand process of clinical pharmacy consultation,

**Dr. M. Ramesh,** Professor & Head, Department of Pharmacy Practice received 'Best Poster Award' for the paper titled 'Pharmacovigilance of psychotropic medicines in developing country- A prospective surveillance' during Indo-US Conference on Emerging Trends in Health Care: Lessons from Clinical and Translational Research held at JSS Hospital, Mysuru on 14<sup>th</sup> & 15<sup>th</sup> September 2015

drug information service, poison information service, pharmacotherapy referrals at JSS Hospital, Mysuru. Students had a chance to participate in daily activities of the department along with their clinical rotations. In addition to ward round participation, students were actively involved in the learning process of various other innovative pedagogy including case presentation, weekly journal clubs, group discussion.



Mallory Adams, Whitney Miller and Maryam Molki with JSSCP Staff

**Mr. Himanshu Patel**, Lecturer, Department of Pharmacy Practice received **'Best Poster Award'** for the paper titled 'A comparative study to evaluate treatment patterns and resulting utility in patients of head & neck cancers under private payment scheme and government scheme' during Indo-US Conference on Emerging Trends in Health Care: Lessons from Clinical and Translational Research held at JSS Hospital, Mysuru on 14<sup>th</sup> & 15<sup>th</sup> September 2015

#### Ms. Chanchal AM, Pharm D. Intern received

'Best Presenter award' for the research paper titled "Predictors and Direct cost Associated with Cutaneous Adverse Drug Reactions' authored by Madhan Ramesh, Juny Sebastian, Chanchal AM and Vijayalaxmi NS during 67th Indian Pharmaceutical Congress held at JSS University, Mysuru from 19th to 21st December 2015

#### The Drug & Poison Information Service

Our Department can help you with any questions you might have on the use of medicines or the management of poisoned patients. Also, we can assist you with any medication related problems that you encounter in your daily practice. The services are made available on all working days and it is provided free of cost. We request you to avail the drug and poison information services.

 $\textbf{Toll free - 1800-425-0207; Ph: 2335577; Extn. 5577; E-mail: \ dic.jsscp@jssuni.edu.in; pic.jsscp@jssuni.edu.in; pic.jsscp@jssuni.edu.in; \ Website: picjsscp.jssuni.edu.in; \ Description of the picj$ 

Your suggestions are welcome. Please send your comments/suggestions to the editors at : dic.jsscp@jssuni.edu.in

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