

NIRMALA COLLEGE OF PHARMACY



NIRMALA COLLEGE OF PHARMACY MUVATTUPUZHA

Muvattupuzha P.O., Ernakulam Dist., Kerala – 686661

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FIRST CYCLE NAAC ACCREDITATION 2023

CRITERION 1



CURRICULAR ASPECTS

**1.3.2. Percentage of students undertaking project work/field work/ internships
(Data for the latest completed academic year)**

Submitted to



THE NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

NIRMALA COLLEGE OF PHARMACY, MUVATTUPUZHA



1.3.2. Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year:2022-2023)

IV PHARM D FIELD WORK

OBJECTIVES

- To provide pharmaceutical care.
- To provide upto date unbiased drug information to patients and other health care providers.

COURSE OUTCOMES

Students will be able to provide pharmaceutical care intervention's by analysing the drug chart, lab reports and clinical conditions of patient.

CONTENTS

- PERMISSION LETTER FOR FIELD WORK FROM THE COMPETENT AUTHORITY.
- REPORT OF FIELD WORK
- SAMPLE PHOTOGRAPHS OF THE FIELD WORK



Digitally signed by
BADMANABAN RAMALINGAM
Date: 2023.12.28 17:03:40
+05'30'



NIRMALA MEDICAL CENTRE
(A unit of Nirmala Society for Medical Care, Reg. No ER-503/01)
Muvattupuzha – 686 661, Kerala , India
E-mail: nirmalamedical@gmail.com Ph: 04852835151
Web: www.nirmalamedicalcentre.com



Date: 10/10/2022

LETTER OF PERMISSION

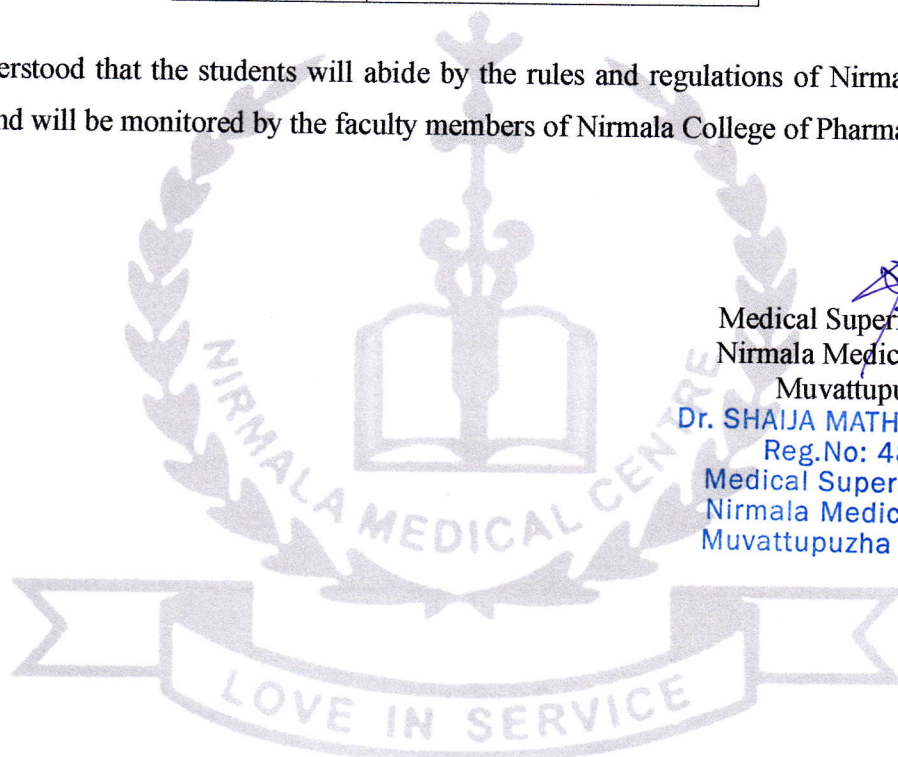
The following students of Fourth year Pharm D, Nirmala College of Pharmacy, Muvattupuzha are permitted to undergo fieldwork/hospital training for a period of Four months (24/10/2022-28/02/2023), as a part of their academic requirement specified by Pharmacy Council of India.

Sl. No	Name of Student
1	Aleena Benoy
2	Aleena Elsa Jacob
3	Amy Thankachan
4	Aneeta Baiju
5	Angelin Jaimon Augustine
6	Anjaly Saji
7	Archa S Nair
8	Ashna Joy
9	Aswathy Saji
10	Dona Basil
11	Elizabeth Rachal James
12	Elmy Issac John
13	Farsana Nazar
14	Goutam Gopakumar
15	Jisa Elizabeth Sabu
16	Jismy Jaison
17	Josna C Jayan
18	Linette Sabu
19	M P Fida Firdouse



20	Niveena Varghese
21	Parvathy B Nair
22	Pooja Raj AB
23	Shefin Siby
24	Siyana Rahim
25	Sneha Roy
26	Sona Vincent
27	Sreelakshmi Sreekumar
28	Stebin Mathew

It is understood that the students will abide by the rules and regulations of Nirmala Medical Center and will be monitored by the faculty members of Nirmala College of Pharmacy.



[Signature]
 Medical Superintendent
 Nirmala Medical Centre
 Muvattupuzha
 Dr. SHAIJA MATHEW DGO,DNB
 Reg.No: 48253
 Medical Superintendent
 Nirmala Medical Centre
 Muvattupuzha - 686661



NIRMALA COLLEGE OF PHARMACY, MUVATTUPUZHA



FIELD WORK REPORT IV PHARM D

Submitted by

Aleena Benoy

Aleena Elsa Jacob

Aneeta Baiju

Anjaly Saji

Archa S Nair

Ashna Joy



DRUG INFORMATION QUERY-I

AIM

to answer the given drug information query using modified systematic approach.

QUERY:

Dr: VS is a consultant physician in a multispeciality hospital. He calls the drug information center of the hospital to modify the treatment in one of his patients. Patient is a 45 yr old woman. She is taking Olazepine 10mg daily for schizophrenia. Patient has type II DM, which is managed by diet alone. After 6 weeks of starting olazepine, patient noted deterioration in blood glucose level control.

Her fasting blood glucose levels before treatment was started generally in the range 105 mg/dL. But now its increased to 130 mg/dL. Patient has gained 2.5 kg of weight since olazepine was started. Doctor wants to know whether olazepine has likely to have worsen the diabetic control and if so which alternative, antipsychotic drug may be used?

PROCEDURE

Step 1:

Secure the demographics of the enquirer:

Date of Enquiry: 7-9-2018

Name of Enquirer: Dr VS

Professional Status: Consultant Psychiatrist



Step 2:

Obtain the background information

Purpose of Enquiry: for clinical application

Time limit for answering the query: not mentioned.

Patient is a 45 yr old woman, she is taking olanzapine (omg) daily for schizophrenia. Patient has type II DM, which is managed by diet alone.

After 6 weeks of starting olanzapine, patient noted deterioration in blood glucose level. Her fasting blood glucose level before treatment was stable generally in the range 105 mg/dL, but now its increased to around 130 mg/dL. Patient has gained 2.5 kgs since olanzapine has started.

Step 3:

Determine & categorize the ultimate question:

Question: whether olanzapine alters diabetic control and lead to weight gain?

Category: ADR type query



Step 4:

Develop search strategy and conduct search

Since its an ADR type question, different drug information handbook like AHFS, drug information, drug information database like Lexicomp, different references on ADR may be searched

Step 5:

Perform evaluation, analysis and synthesis

According to "clinical pharmacy and therapeutics" by Roger Welke and Cate Woltje 5th edition. The antipsychotic

drug olanzapine does not have direct effect on blood glucose and food metabolism, but associated with loss of control of food intake. Because weight gain, also increases incidence of DM.

Olanzapine doesn't show imbalance in blood glucose levels and no weight gain in normal doses. Also haloperidol can be used, which does not produce either of this.

According to "Drug Information Handbook" by Lexicomp, 11th edition, olanzapine when used in psychotic patient produce weight gain and DM. As per this reference, Quetiapine is also found to produce weight gain. But haloperidol is the safer alternative.

According to complete drug reference, by Martindale Olanzapine was found to produce weight gain and DM. But haloperidol or trifluoperazine can be suggested.

According to Essentials of Medical Pharmacology by K.D Tripathi, 7th edition, Olanzapine produce weight gain and DM and it can be replaced with haloperidol & trifluoperazine.

By researching PubMed, using MeSH terms "Antipsychotic", "weight gain", using Boolean operator. "AND" following article was retrieved: Second generation antipsychotic and metabolic defect, a Comprehensive Literature Review from the Journal "CNS Drugs 2005, 19 supplement 1; 1-93";

Clozapine and Olanzapine treatment are associated with greater risk of clinically significant with other agent producing relatively lower levels of risk.

Risperidone, Quetiapine, Amisulpride, Ziprasidone generally show less to

moderate level of mean weight gain & moderate risk of clinically significant increase in weight. Ziprasidone, aripiprazole treatment is generally associated with minimal mean weight and lowest risk of more significant increases

Step 6:

formulate and provide the response

As per the evaluation of analysis, we can conclude that weight gain or diabetes was caused by olanzapine and it can be replaced with 2nd generation alternatives like Ziprasidone, Aripiprazole, Risperidone, Quetiapine & Amisulpride. Of 1st generation agents like haloperidol, trifluoperazine

Step 7:

Conduct follow up & documentation

follow up & documentation done



REPORT

The given drug information query was answered.

REFERENCE:

- i) Clinical Pharmacy & Therapeutics by Roger Walker 1st edition
pg no: 483-486
- ii) Lexicomb drug information Handbook, 11th edition
pg no: 673-
- iii) The Complete Drug Reference, by Martindale, 33rd edition
pg no: 1710, 1693, 686

7/10



NIRMALA COLLEGE OF PHARMACY

DEPARTMENT OF PHARMACY PRACTICE

Phone: 0485-2830666, email: dic@nirmalacp.org

Case No:

CASE REPORT FORM

Patient Name <u>Mr X</u>				Sex <u>M</u>				Age <u>49 yrs</u>									
Department <u>Psychiatry</u>				IP Number <u>2520191</u>				Ht.									
Consultant Doctor <u>J</u>				DOA <u>24-1-20</u>				DOD <u>9-2-20</u>									
CHIEF COMPLAINTS: <u>chronic use of alcohol in dependence pattern</u>																	
Social Hx: <u>Alcohol use</u> (Smoking/Alcohol/food habits/ exercise)						Allergy history: <u>NIL</u>											
HISTORY OF PRESENT ILLNESS:																	
MEDICAL HISTORY: (Name of disease, Duration of illness & current status of illness with lab values if any) <u>Type II DM</u>																	
MEDICATION HISTORY: (Name of the medication, Dose, Frequency, and Duration) <u>T. metformin 500mg OD</u> <u>T. Glimepiride 2mg OD</u>																	
FAMILY HISTORY: <u>Hypertension</u>																	
GENERAL EXAMINATIONS: Physical Examination & Systemic Examination																	
Date →	24	25	26	27	28	29	30		1	2	3	4	5	6	7	8	9
Temp	N	N	N	N	N	N	N	CVS	N	N	N	N	N	N	N	N	N
BP	120/80	120/80	110/90	110/80	N	N	N	CNS	N	N	N	N	N	N	N	N	N
PULSE	22	22	22	24	22	24	22	RS	N	N	N	N	N	N	N	N	N
RR	84	86	80	80	80	76	82	P/A	80	84	82	80	80	80	80	82	80
PROVISIONAL DIAGNOSIS:																	
LAB INVESTIGATION:																	
PARAMETERS		OBSERVED VALUE				OBSERVED VALUE											
		25/1	3/2			25	31										
CBC						BLOOD SUGAR:											
Hb (M-14-16, F-13-15 gm)		14.4		15.2		RBS: 80-140 mg/dl		1.58		119		164		400			
WBC 4000-11000 Cells/cmm						FBS:		231		364		362		163		192 FB	
DC:						PPBS:											
N: 40 - 80%		71%				RFT		25/11									
E: 1 - 6%		2%				BUN: 7-18 mg/dl		1.4									
B: 1 - 2%						Creatinine: 0.6-1.4 mg/dl		0.4									
L: 20 - 40%		27%				Sodium: 134-144 mmol/lit											
M: 2 - 10%						Potassium: 3.5-5.0 mmol/lit											
Platelet count: 1.5-4.0 L/mm ³						Chloride: 98-102 mmol/lit											
Bicarbonate: 21-28 mmol/lit																	
LFT:						LIPID PROFILE											
Bilirubin (T): 0.3-1.2mg/dl		1.3				Cholesterol <200 mg/dl											
Bilirubin (DIR): 0.1-0.3mg/dl		0.3				LDL <100 mg/dl											
SGPT: 30-65 U/L		40				HDL >50 mg/dl											
SGOT: 15-37 U/L		28				TG <150 mg/dl											
Total protein: 6.4-8.2 g/dl		6.5				CRP		NIL									
Alk.phos: 50-136 U/L		118															
Globulin: 2-3 g/dl		2.5															
Albumin: 3.5-5.2 g/dl		4															

A/u ratio : 1:611



OTHER TESTS (If any)

FINAL DIAGNOSIS: A case of alcohol dependence syndrome, nicotine dependence, mixed disorder, type II DM

S.No	DRUGS	FREQUENCY	date →	DURATION																
				24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9
1.	Clonazepam	1mg 1x HS		✓	✓	✓	✓	✓	✓	✓	✓	✓								
2.	T. Acamprol	333mg 2-1-1		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3.	T. Benalgin	100mg BD		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4.	T. Zuclofen	100mg Oral		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5.	Bupropion	Oral BD 150mg		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.	T. pantocid	40mg OD		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7.	Metformin	500mg OD		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8.	Alimofide	2mg OD		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9.	T. Ativan	2mg OD/TID					✓	✓	✓	OD	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10.	T. hylomine	25mg OD																	✓	✓
11.	T. Sigodm	1mg OD																	✓	✓
12.																				
13.																				
14.																				
15.																				
16.																				
17.																				
18.																				
19.																				
20.																				

Discharge Medication

S.No	Drug	Frequency/ Duration	S.No	Drugs	Frequency/ Duration
1.	T. Acamprol 333mg	2-1-1 x 1 week	13.		
2.	T. Benalgin 100mg	1-0-0 "	14.		
3.	T. Alimofide 2mg	1-0-0 "	15.		
4.	T. Metformin 500mg	1-0-1 "	16.		
5.	Bupropion SR 150mg	1-0-1 "	17.		
6.	T. Zuclofen	1-0-1 "	18.		
7.	T. pantocid 40mg	1-0-0 "	19.		
8.	T. Sigodm 1mg	0-0-1 "	20.		
9.	T. hylomine 25mg	0-0-1 "	21.		
10.	T. Ativan 2mg	SOS "	22.		
11.			23.		
12.			24.		



PHARMACISTS INTERVENTION

Bupropion -isperidone → combining them may increase the risk of seizure.
 In addition, bupropion can ↑ the blood level ofisperidone
 Amisulpride - bupropion: can ↑ the blood levels of amisulpride

Name & Signature of Pharm.D Student

Batch:

Year: 4th yr Pharm D

Name

Aleena Benoy

Signature

AB



NIRMALA COLLEGE OF PHARMACY
DEPARTMENT OF PHARMACY PRACTICE
Phone: 0485-2830666, email: druginfoncp@gmail.com

MEDICATION ERROR REPORT FORM

Initial: <u>Ms: X</u>	Age: <u>72</u>	Sex: <u>M/F</u>
DOA: <u>All</u>	IP/OP No.: <u>R18770</u>	Dept: <u>Medical ward</u>
Diagnosis: <u>Febile neutropenia, VTI, severe anemia, urinary retention, refractory hypothermia, sepsis</u>		
Medication error Date: <u>10-11</u>		Date/Time error found: <u></u>
Date of recovery: <u></u>		<u>NIL</u>

Error Reported by (Name & Designation): Pharmacy student

Error Occurred at:	Hospital ☒	Outpatient ☐
	Community pharmacy ☐	Patient's Home ☐

Did the error reach the patient ☒ Yes ☐ No

People involved in the error:	Physician ☐	Pharmacist ☒	Nurse ☐	Patient ☐	Bystander ☐
-------------------------------	------------------------------------	--	--------------------------------	----------------------------------	------------------------------------

TYPE OF MEDICATION ERROR FOUND/ REPORTED

Prescribing error	Drug use without indication	Dispensing error	Medication given without an order	Administration error
	Incorrect drug selection ☒		Charted incorrectly and given	
	Wrong dosage form		Charted incorrectly and not given	
	Wrong dose ☒		Wrong time	
	Wrong frequency		Wrong frequency	
	Wrong duration		Wrong/Inappropriate route	
	Illegible prescription		Wrong dose	
	Drug/class duplication		Compliance error	
	Monitoring error		Drug Expired	
	Drug interaction		Drug interaction	
Omission error				

Medication error resulted in

"Near miss" error	Error, no reaction	Description of reaction
Error, no apparent reaction	Error, reaction, no medical treatment required	☒ <u>patient developed drug induced febrile syndrome</u>
Error, reaction, medical treatment required		

Suspected Medication involved in the error

Name (brand and/or generic name)	Manufacturer (If known)	Batch No. / Lot No. (If known)	Exp. Date (If known)	Dose used	Route used	Frequency	Therapy dates (if unknown, give duration)		Reason for Use or prescribed for
							Date started	Date stopped	
<u>Cefotaxime</u>	<u>NIL</u>	<u>NIL</u>	<u>NIL</u>	<u>160mg</u>	<u>IV</u>	<u>BD</u>	<u>10/11/19</u>	<u>19/11/19</u>	<u>febrile neutropenia</u>

Authorities Informed

Physician notified:	Name and signature of physician: <u>X4: [Signature]</u>
Pharmacist notified:	Name and signature of pharmacist: <u>Dr. Aleena Benay</u>
Nurse notified:	Name and signature of nurse: <u>[Signature]</u>
Was Patient Counseling provided	Before Error ☐ After Error ☒

Suggest any recommendations to prevent recurrence of the error:

Avoid the use of Aminoglycoside category antibiotics

Name and signature of person filling out report:

Aleena Benay
[Signature]

Name and signature of preceptor:

[Signature]





NIRMALA COLLEGE OF PHARMACY
DEPARTMENT OF PHARMACY PRACTICE
Phone: 0485-2830666, email: druginfoncp@nirmalacp.org

PATIENT HISTORY INTERVIEW - FORM

PATIENT DETAILS

Initial: <u>Nrx</u>	IP/OP no.: <u>14-23</u>	Date of admission: <u>2/12/19</u>
Age: <u>82 y</u>	Sex: <u>M/F</u>	Social status:
	Height:	Weight:
Pregnant: Y/N	Breast Feeding: Y/N	Allergies: Food/Drug/Environment:

PSYCHOSOCIAL ASSESSMENT

Living Situation	Normal	On bed rest	☒
	Physically Challenged	Support System	
Family Status	Single	Nuclear Family	☒
	Children	Combined Family	
Educational Status			
Treatment/Follow -Up	Compliant		☒
	Non-compliant (reason)		

PRESCRIPTION MEDICATION HISTORY

Name	Generic name	Strength	Directions	Duration	Indication	Physician
T. lanoxin	Digoxin	0.25 mg	(5 in 1 week)	4 mth	heart failure	Dr Byju
Dylor plus	spironolactone + losartan	50mg + 10mg	BD	"	Diuretic	"
Fabryostat		40mg	OD	"	Unicard amlodipine	"
Ultracet semi	Acetaminophen + tramadol	162.5 mg + 12.75 mg	1-1-1	"	pain	"

OVER-THE COUNTER MEDICATION HISTORY

Name/ strength	Generic	Directions	Duration	Indication	Effectiveness
		<u>NIL</u>			



MEDICAL HISTORY:

Medical condition	Duration	Control of illness (lab values if any)
eml - accelerated phase HTN	days & above	

Note: Family history etc.

Diabetes

Hypertension

SOCIAL HISTORY

SOCIAL HISTORY				
Nicotine use	✓	Never		
Alcohol		Never		✓
Caffeine (Tea/ Coffee)		Never		
Dietary habits		Veg	✓	N.Veg
Meals per day		Dietary restrictions (if any):		

Other information/ Comments:

Clonidine + Nebivolol → either less toxicity of either by unspecified interaction mechanism

Nebivolol + Digoxin → either less the toxicity of either by unspecified interaction mechanism



Name & Signature of Student:

Aleena Beroj

AA

Name & Signature of Preceptor:

Do

NIRMALA COLLEGE OF PHARMACY, MUVATTUPUZHA



FIELD WORK REPORT IV PHARM D

Submitted by

Amy Thankachan

Aswathy Saji

Elizabeth Rachal James

Farzana Nazar

Goutam Gopakumar

Jisa Elizabeth Sabu



DRUG INFORMATION QUERY - IAim

To answer the given drug information query using modified systematic approach.

QUERY

Dr. V.S is a consultant physician in a multi-speciality hospital. He calls the drug information centre of the hospital to modify the treatment is one of his patients. Patient is a 45 year old woman. She is taking olanzapine 10mg daily for schizophrenia. Patient have type 2 DM which is managed by diet along. After 6 weeks of starting olanzapine patient noted deterioration in blood glucose level control. Her fasting blood glucose level, before treatment was started generally is the range 105 mg/dl. But now, it increased to 130 mg/dl. Patient has gained 2.5 kg weight since olanzapine was started. Doctor wants to know whether olanzapine has likely to have worsen the diabetic control and if so, which alternative anti-psychotic drug may be used.

PROCEDURE

Step I: Secure the demographic of the enquiry

Date of enquiry : 7-09-2018



Name of enquiry : Dr. V.S

Professional status : Consulting psychiatrist

Step II : Obtain the background information

Purpose of enquiry : For clinical application

Time limit for answering

the query : Not mentioned.

Patient is 45 years old woman, she is taking clozapine 10mg daily for schizophrenia. Patient has Type 2 DM, which is managed by diet alone. After 6 weeks of starting clozapine patient noted deterioration in blood glucose level. Her fasting blood glucose level before treatment was started generally is in the range 105 mg/dl. But now it is increased to 130 mg/dl. Patient has gained 2.5 kg since clozapine was started.

Step III : Determine and categorise the ultimate questions.

Question: Whether clozapine alters diabetic control and lead to weight gain.

Category: ADR type query.



Step IV : Develop search strategy and conduct search

Since it is an ADR type question, different drug information handbook like ADRS drug information, drug information

date based ^{Cite.} lexiconp, different references on ADP may be searched.

Step II : Perform evaluation, analysis and synthesis.

According to 'clinical pharmacy & therapeutics' by Rogers walkers and Cate with 5th edition. The Anti-psychotic drug olanzapine doesn't have direct effect on blood glucose level and food metabolism, but associated with loss of control of food intake, they cause weight gain, also increases incidence of DM. Olanzapine doesn't show imbalance in blood glucose level. And no weight gain on normal doses. Also haloperidol can be used, which doesn't produce either of this.

According to 'drug information handbook' by lexiconp 11th edition, olanzapine was when used in psychotic patient produce weight gain and DM. As per this reference, Quetiapine is also found to produce weight gain. But Haloperidol is safer alternative.

According to 'complete drug reference' by Martin Dale' olanzapine was found to produce weight gain and DM. But haloperidol or fluphenazine can be suggested.

According to 'essential of medicinal pharmacology' by K.D Tripathi 6th edition, olanzapine produce weight gain and DM. And it can be replaced by Haloperidol and fluphenazine.

While Researching PubMed using Mesh terms

'Antipsychotic', 'weight gain' using Boolean operator.
'AND' following criteria was retrieving. Second generation
Anti-psychotic and metabolic defect, a Comprehensive
Literature review, from the 'Journal CNS drugs'
2005, 19 supplement 1, 1-93; Clozapine and olanzapine
treatment are associated with greater risk of clinically
significant weight gain compared with other agents producing relatively lower
level of risk. Risperidone, Quetiapine, Amisulpride,
Zotepine generally show low to moderate level of
mean weight gain and moderate risk of clinically
significant increase in weight. Ziprasidone, Aripiprazole
treatment generally associated with minimal mean weight
and lowest risk of more significant increases.

Step VI: Formulate and provide response.

As per the evaluation of analysis, we can conclude
that weight gain and diabetes was caused by olanzapine
and was replaced with second generation alternatives
like Ziprasidone, Aripiprazole, Risperidone, Quetiapine,
Amisulpride, of first generation agents like Haloperidol,
Thioridazine.

Step VII: Conduct follow up and documentation

Follow up and documentation done.



REPORT

The given drug information query was answered.

REFERENCE

1. Clinical Pharmacy and Therapeutics By Rogers Collier 10th edition page no: 483-486.
2. Lexicomp Drug Information Handbook, 11th edition
p. no: 693-
3. The Complete Drug Reference By Martin Dale 32nd edition
Page no: 1710, 693, 686.



OTHER TESTS (If any)

14/12/2019

TSH - 2.3 u/L

ESR - 2 mm/hr

Urea - 18 mg/l

FINAL DIAGNOSIS: Substance induced psychosis, ADS- Relapse, Cannabis dependence
Syndrome Relapse. Other Psychoactive substance abuse

S.No	DRUGS	FREQUENCY	date →	DURATION											
1.	OLEANZ	10mg	0-0-1	}	14 th Dec - 3 rd Jan										
2.															
3.	T. ENCORATE CHRONO	500mg	1-0-1												
4.															
5.	T. PACIFANE	2mg	1-0-0												
6.															
7.	T. ZOLPRESH	10mg	0-0-1												
8.															
9.	T. EVIAN	400mg	1-0-0												
10.															
11.															
12.															
13.															
14.															
15.															
16.															
17.															
18.															
19.															
20.															

Discharge Medication

S. No	Drug	Frequency/ Duration	S. No	Drugs	Frequency/ Duration
1.	T. OLEANZ	10mg 0-0-1	13.		
2.			14.		
3.	T. ENCORATE CHRONO	500mg 1-0-1	15.		
4.			16.		
5.	T. PACIFANE	2mg 1-0-0	17.		
6.			18.		
7.	T. ZOLPRESH	10mg 0-0-1	19.		
8.			20.		
9.	CAP. EVIAN	400mg 1-0-0	21.		
10.			22.		
11.			23.		
12.			24.		

PHARMACISTS INTERVENTION

Moderate Drug Interaction

Valproic acid & Zolpidem

Using Valproic acid with zolpidem may rise the SE such as dizziness, confusion, difficulty in breathing etc.

Name & Signature of Pharm.D Student

Batch:

Year:

Name

Signature





NIRMALA COLLEGE OF PHARMACY
DEPARTMENT OF PHARMACY PRACTICE
Phone: 0485-2830666, email: dic@nirmalacp.org

PATIENT HISTORY INTERVIEW - FORM

PATIENT DETAILS

Name: <u>M. X</u>	IP/OP no.: <u>1432</u>	Date of admission:	Case No.:
Age: <u>82</u>	Sex: <u>M/F</u>	Social status:	Diagnosis: <u>UTI, sepsis, severe Anemia, Acute renal Htn, bone pain, CML</u>
DOB:	Height: <u>-</u>	Weight: <u>-</u>	BMI: <u>-</u>
Pregnant: Y/N	Breast Feeding: Y/N	Allergies: Food/Drug/Environment: <u>-</u>	
Address: <u>-</u>		Mobile/Phone No.:	

PSYCHOSOCIAL ASSESSMENT

Living Situation	Normal	On bed rest	☒
	Physically Challenged	Support System	
Family Status	Single	Nuclear Family	☒
	Children	Combined Family	
Educational Status			
Treatment/Follow -Up	Compliant		☒
	Non-compliant (reason)		

PRESCRIPTION MEDICATION HISTORY

Name	strength	Generic name	Directions	Duration	Indication	Physician
<u>Lanoxin</u>	<u>0.25mg</u>	<u>Digoxin</u>	<u>0.5-0-0</u>	<u>4 months</u>	<u>Heart failure</u>	<u>Dr. Biju</u>
<u>Dytos plus</u>	<u>50 mg + 20mg</u>	<u>Spironolactone + furosemide</u>	<u>B.D</u>	<u>"</u>	<u>Diuresis</u>	
<u>Febuxostat</u>	<u>40mg</u>		<u>OD</u>	<u>"</u>	<u>uric acid accumulation</u>	
<u>Ultracet</u>	<u>1600mg + 8.25 mg</u>	<u>Acetaminophen</u>	<u>1-1-1</u>	<u>"</u>	<u>pain</u>	

OVER-THE COUNTER MEDICATION HISTROY

Name/ strength	Generic	Directions	Purpose	Duration	Effectiveness
<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>



MEDICAL HISTORY:

Medical condition	Duration	Control of illness (lab values if any)
cmr - Accelerated phase HFN	20 yrs above	-

Note: Family history etc.

Diabetes

HTN

SOCIAL HISTORY

Nicotine use	☒ Never	☐ Stopped	Yes	year	Using	Yes	year
Alcohol	Never	☒ Stopped	Yes	year	Using	Yes	year
Caffeine (Tea/ Coffee)	Never	Stopped	Yes	year	Using	☒ Yes	year
Dietary habits	Veg	☒ N.Veg	Meals per day		Food restrictions:		

Other information/ Comments:

- Clozapine + nebivolol $\Rightarrow$ either the toxicity of other by unspecified interaction mechanisms.

- Nebivolol + Digoxin $\Rightarrow$ either the toxicity of other by unspecified interaction mechanisms.



Name & Signature of Student: Amy Thakur

Name & Signature of Preceptor:

Submission Date:

18/11

MEDICATION ERROR REPORT FORM

Name: <u>Mr. X</u>		Age: <u>74</u>		Sex: <u>M/F</u>	
DOB:		IP/OP No.:		Dept: <u>Medical ward</u>	
Diagnosis: <u>Abscess on left cheek, pyoderma</u>					
Medication error Date:		Medication error Time:		Date/Time error found:	
Date of recovery:					
Error Reported by: <u>Amey Thekkan</u>		Name & Designation: <u>Pharmacy student</u>			
Name, dose, route of medication involved:					
Indicate the location of error:		Hospital		☒ Outpatient	
		Community pharmacy		Patient's Home	
Did the error reach the patient ☐ Yes ☐ No					
People involved in the error:		Physician	Pharmacist ☒	Nurse	Patient
					Bystander

TYPE OF MEDICATION ERROR FOUND/ REPORTED

Prescribing error	Drug use without indication	Dispensing error	Wrong drug	Administration error	Medication given without an order
	Incorrect drug selection		Wrong strength		Charted incorrectly and given
	Wrong dosage form		Out of date		Charted incorrectly and not given
	Wrong dose		Mislabeled		Omission error
	Wrong frequency		Wrong dosage form		Wrong time
	Wrong duration				Wrong frequency
	Illegible prescription				Wrong route
	Drug/class duplication ☒				Wrong dose
	Monitoring error				Compliance error
	Drug interaction				Out of date
				Drug interaction	

Medication error resulted In

"Near miss" error	Error, no reaction	☒	Description of reaction
Error, no apparent reaction	Error, reaction, no medical treatment required		
Error, reaction, medical treatment required			

Suspected Medication involved in the error

Name (brand and/or generic name)	Manufacturer (If known)	Batch No. / Lot No. (If known)	Exp. Date (If known)	Dose used	Route used	Frequency	Therapy dates (if unknown, give duration)		Reason for Use or prescribed for
							Date started	Date stopped	
<u>Inj. Augmentin</u>				<u>1.25gm</u>	<u>IV</u>	<u>TID</u>	<u>9-12-19</u>	<u>12-12-19</u>	<u>Infection</u>
<u>Inj. meropenem</u>				<u>500mg</u>	<u>IV</u>	<u>1-2-1</u>	<u>11-12-19</u>	<u>16-12-19</u>	<u>Infection</u>

Authorities Informed

Physician notified: ☒	Name and signature of physician:
Pharmacist notified: ☐	Name and signature of pharmacist:
Nurse notified: ☐	Name and signature of nurse:
Was Patient Counseling provided	Before Error ☒ After Error ☐

Suggest any recommendations to prevent recurrence of the error:

Name and signature of person filling out report: <u>Amey Thekkan</u>	Address: <u>Cochin</u>
Phone: <u>9034119460</u>	Email: <u>kollam</u>



NIRMALA COLLEGE OF PHARMACY, MUVATTUPUZHA



FIELD WORK REPORT IV PHARM D

Submitted by

Angelin Jaimon Augustine

Jismy Jaison

Josna C Jayan

Linette Sabu

M P Fida Firdouse

Niveena Varghese



DRUG INFORMATION QUERY - I

AIM: To answer the given drug information query using modified systematic approach.

QUERY:

Dr. VS is a consultant physician in a multispeciality hospital. He calls the drug information centre of the hospital to modify the treatment in one of his patient.

The patient is a 45yr old woman. She is taking Olanzapine 10mg daily for schizophrenia. Patient has type II DM which is managed by diet alone. After 6 weeks of starting Olanzapine, patient noted deterioration in blood glucose level control. Her FBS before treatment was started generally in the range 105 mg/dl. But now it's increased to 180 mg/dl. Patient has gained 2.5kg weight since Olanzapine was started.

Doctor wants to know whether Olanzapine has likely to have worsened the diabetic control. If so, which alternative antipsychotic drug may be used.

PROCEDURE

Step 1: Secure the demographic of the enquirer

Date of enquiry: 7/9/2018

Name of enquirer: Dr. VS

Professional Status: Consultant Psychiatrist



STEP 2: Obtain the background Information

Purpose of enquiry: Clinical Application

Time limit for answering the query: Not mentioned

Patient is a 45 year old women, she is taking Olanzapine 10mg daily for schizophrenia. Patient has Type II DM which is managed by diet alone. After 6 weeks of starting Olanzapine patient noted deterioration in blood glucose level. Her fasting blood glucose level before treatment was started generally in the range 105mg/dL. But now it increased to 130mg/dL. Patient has gained 2.5kg since Olanzapine was started.

STEP 3: Determine and categorise the ultimate Q Question - Whether Olanzapine alters diabetic control and lead to weight gain?

category: ADR type query

STEP 4: Develop Search Strategy and Conduct Research

Since it is an ADR type question, different drug information handbook like ADRB drug information, drug information data like Lexicomp, different references on ADR may be searched.

STEP 5: Perform Evaluation, Analysis & Synthesis

According to clinical pharmacy of therapeutics by Roger Walker and Cate Witterze 5th edition, the antipsychotic drug Olanzapine does not have



direct effect on blood glucose and food metabolism, but associated with loss of control of food intake. They cause weight gain, also increases incidence of DM. Olanzapine doesn't show imbalance in blood glucose level. And no weight gain in normal doses.

Also haloperidol can be used, which doesn't produce either of this.

According to "Drug Information Handbook" by Lexicomp, 11th edition, Olanzapine when used in psychotic patients produce weight gain and DM.

As per this reference, Quetiapine is also found to produce weight gain but haloperidol is safer alternative. According to complete drug reference by Martin Dale,

Olanzapine was found to produce weight gain and DM. But haloperidol or trifluoperazine can be suggested.

According to ~~ess~~ essentials of Medicinal pharmacology by KD Tripathi 6th edition olanzapine produce weight gain and DM and it can be replaced with haloperidol or trifluoperazine while researching pubmed using Mesh terms 'antipsychotic', 'weight gain' using Boolean operators. "AND" following article was retrieved.

Second generation anti psychotic and metabolic defect as comprehensive literature review, from the journal "CNS drugs 2005, 19th supplement-1; 1-93", clogapine and olanzapine treatment are associated with greatest risk of clinically significant with other agent producing relatively lower levels of risk. Risperidone, Quetiapine, Amisulpride, Zolopine.

generally show low to moderate level of mean weight gain and moderate risk of clinically significant increase in weight. Ziprasidone, Aripiprazole are generally associated with minimal mean weight and lowest risk of more significant increases.

STEP 6: Formulate and Provide Response

As per the evaluation of analysis, we can conclude that weight gain in diabetes was caused by clonazapine and it can be replaced with second generation alternatives like Ziprasidone, Aripiprazole, Risperidone, Quetiapine, Amisulpride of 1st generation agents like Haloperidol, Fluoperazine.

STEP 7: Conduct follow up and documentation follow up and documentation done.

REPORT

The given drug information query was answered.

REFERENCE

1. clinical pharmacology and therapeutics by Roger Walker.
5th edition, pg no. 483-486.
2. Lexi-comp drug info handbook, 11th edition
3. the complete drug reference, Martin Dale 33rd edition
pg no., 1710, 683, 686.





CASE REPORT FORM

Patient Name <u>M. X</u>		Sex <u>M</u>	Age <u>49</u>																		
Department <u>Psychiatry</u>	IP Number <u>2520191</u>	Ht.	Wt.																		
Consultant Doctor		DOA <u>24/11/20</u>	DOD <u>9/2/20</u>																		
CHIEF COMPLAINTS: <u>Chronic use of alcohol in dependence</u>																					
Social Hx: (Smoking/Alcohol/food habits/ exercise) <u>Alcohol Use</u>		Allergy history: <u>Nil</u>																			
HISTORY OF PRESENT ILLNESS: <u>Nil</u>																					
MEDICAL HISTORY: (Name of disease, Duration of illness & current status of illness with lab values if any) <u>Type 2DM</u>																					
MEDICATION HISTORY: (Name of the medication, Dose, Frequency, and Duration) <u>T. Metformin 500mg OD</u> <u>T. glimepiride 2mg OD</u>																					
FAMILY HISTORY: <u>Hypertension. (for mother)</u>																					
GENERAL EXAMINATIONS: Physical Examination & Systemic Examination																					
Date →	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9				
Temp	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N			
BP	120/70	120/80	110/70	120/80	N	N	N	N	N	N	N	N	N	N	N	N	N	N			
PULSE	84	86	80	80	80	76	82	80	80	84	82	82	80	80	80	82	80	80			
RR	22	22	22	24	22	24	22	N	N	N	N	N	N	N	N	N	N	N			
PROVISIONAL DIAGNOSIS:																					
LAB INVESTIGATION:																					
PARAMETERS	OBSERVED VALUE		OBSERVED VALUE	OBSERVED VALUE		OBSERVED VALUE		OBSERVED VALUE		OBSERVED VALUE		OBSERVED VALUE		OBSERVED VALUE		OBSERVED VALUE		OBSERVED VALUE			
	25/1	3/2		25	31	1	2	3	4	25	31	1	2	3	4	25	31	1	2	3	4
CBC																					
Hb (M-14-16, F-13-15 gm)	4.4		15.2																		
WBC 4000-11000 Cells/cmm	10,400																				
DC:																					
N: 40 - 80%	71%																				
E: 1 - 6%	2%																				
B: 1 - 2%																					
L: 20 - 40%	27%																				
M: 2 - 10%																					
Platelet count: 1.5-4.0 L/mm ³	2,10,000																				
LFT:	25/1																				
Bilirubin (T): 0.3-1.2mg/dl	1.3																				
Bilirubin (DIR): 0.1-0.3mg/dl	0.3																				
SGPT: 30-65 U/L	40																				
SGOT: 15-37 U/L	28																				
Total protein: 6.4-8.2 g/dl	65																				
Alk.phos: 50-136 U/L	118																				
Globulin: 2-3 g/dl	2.5																				
Albumin: 3.5-5.2 g/dl	4																				
A/G ratio				1.6:1																	



parameters	5/2	6/2	7/2	8/2	9/2
FBS	62	75	200	167	71
RBS	215	231			



OTHER TESTS (If any)

FINAL DIAGNOSIS: A case of Alcohol dependence syndrome, Nicotine dependence syndrome, Mental disorder, type 2DM

S.No	DRUGS	FREQUENCY	date →	DURATION																
				24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9
1.	Lorazepam	1mg HS IV		✓	✓	✓	✓	✓	✓	✓	✓	✓								
2.	T. Acamprol	333mg 2-1-1		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3.	T. Benalgin	100mg BD		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4.	T. Zexdol S	1-0-1 oral		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5.	Bupropion	oral BD 150mg		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.	T. Pantocid	40mg OD		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7.	Metformin	500mg OD		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8.	Glimepiride	2mg OD		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9.	T. Atrien	2mg TID					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10.	Tryptomer	25mg OD							✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11.	T. Sizodon	1mg OD																✓	✓	✓
12.																				
13.																				
14.																				
15.																				
16.																				
17.																				
18.																				
19.																				
20.																				

Discharge Medication

S.No	Drug	Frequency/ Duration	S.No	Drugs	Frequency/ Duration
1.	T. Acamprol 333mg	2-1-1	13.		
2.	T. Benalgin 100mg	1-0-0	14.		
3.	T. Glimepiride 2mg	1-0-0	15.		
4.	T. Metformin 500mg	1-0-1	16.		
5.	Bupropion SR 150mg	1-0-1	17.		
6.	T. Zexdol S	1-0-1	18.		
7.	T. Pantocid 10mg	1-0-0	19.		
8.	T. Sizodon 1mg	0-0-1	20.		
9.	T. Tryptomer 25mg	0-0-1	21.		
10.	T. Atrien 2mg	SOS	22.		
11.			23.		
12.			24.		



PHARMACISTS INTERVENTION

Bupropion + Risperidone - combin. may inc. the risk of seizures. In addn. bupropion can inc. the blood level of risperidone.
 Amitryptiline + Bupropion - same as before & also bupropion can inc. the blood levels of Amitryptiline

Name & Signature of Pharm.D Student

Batch: PHARM D

Year: IV

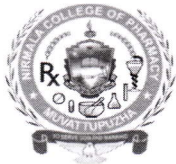
Name

Angelina Jainan

Signature

[Signature]

[Red mark]



NIRMALA COLLEGE OF PHARMACY
DEPARTMENT OF PHARMACY PRACTICE
 Phone: 0485-2830666, email: druginfoncp@gmail.com

MEDICATION ERROR REPORT FORM

Initial: <u>Mr. X</u>	Age: <u>72</u>	Sex: <u>M/F</u>
DOA: <u>Nil</u>	IP/OP No.: <u>R 18770</u>	Dept: <u>Medical Ward</u>
Diagnosis: <u>Febtile Neutropenia, UTI, Severe anemia, urinary retention, R. hypoglycemia, sepsis</u>		
Medication error Date: <u>10/11</u>	Date/Time error found: <u>Nil</u>	
Date of recovery: <u>Nil</u>		
Error Reported by (Name & Designation): <u>Shelin Siby BPharm</u>		
Error Occurred at:	Hospital	☒ Outpatient
	Community pharmacy	Patient's Home

Did the error reach the patient ☒ Yes ☐ No

People involved in the error:

Physician	☒ Pharmacist	Nurse	Patient	Bystander
-----------	--	-------	---------	-----------

TYPE OF MEDICATION ERROR FOUND/ REPORTED

Prescribing error	Drug use without indication	Dispensing error	Medication given without an order
	Incorrect drug selection ☒		Charted incorrectly and given
	Wrong dosage form		Charted incorrectly and not given
	Wrong dose ☒		Wrong time
	Wrong frequency		Wrong frequency
	Wrong duration		Wrong/Inappropriate route
	Illegible prescription		Wrong dose
	Drug/class duplication		Compliance error
	Monitoring error		Drug Expired
	Drug interaction		Drug interaction
Omission error			

Medication error resulted In

"Near miss" error	Error, no reaction	Description of reaction <u>Patient developed drug induced fanconi syndrome</u>
Error, no apparent reaction	Error, reaction, no medical treatment required	
Error, reaction, medical treatment required		

Suspected Medication involved in the error

Name (brand and/or generic name)	Manufacturer (If known)	Batch No. / Lot No. (If known)	Exp. Date (If known)	Dose used	Route used	Frequency	Therapy dates (if unknown, give duration)		Reason for Use or prescribed for
							Date started	Date stopped	
<u>Gentamycin</u>	<u>Nil</u>	<u>Nil</u>	<u>Nil</u>	<u>160mg</u>	<u>IV</u>	<u>BD</u>	<u>10/11/19</u>	<u>17/11/19</u>	<u>Febtile Neutropenia</u>

Authorities Informed

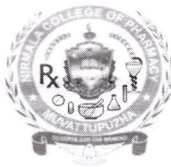
Physician notified:	Name and signature of physician:	<u>Nil</u>
Pharmacist notified:	Name and signature of pharmacist:	<u>Nil</u>
Nurse notified:	Name and signature of nurse:	<u>Nil</u>
Was Patient Counseling provided	Before Error	After Error ☒

Suggest any recommendations to prevent recurrence of the error:

Avoid the use of Aminoglycoside category antibiotics to this patient.

Name and signature of person filling out report: <u>Angelina Jaimon RPH..</u>	Name and signature of preceptor:
---	----------------------------------





PATIENT HISTORY INTERVIEW - FORM

PATIENT DETAILS

Initial: Mr. X		IP/OP no.: 1423	Date of admission: 02/12/2019
Age: 82	Sex: M/F	Social status:	Diagnosis: UTI, Sepsis, Severe anemia, accelerated HTN, bone pain, CML
	Height: Nil	Weight: Nil	BMI: Nil
Pregnant: Y/N	Breast Feeding: Y/N	Allergies: Food/Drug/Environment: Nil	

PSYCHOSOCIAL ASSESSMENT

Living Situation	Normal	On bed rest	☒
	Physically Challenged	Support System	
Family Status	Single	Nuclear Family	☒
	Children	Combined Family	
Educational Status			
Treatment/Follow -Up	Compliant		☒
	Non-compliant (reason)		

PRESCRIPTION MEDICATION HISTORY

Name	Generic name	Strength	Directions	Duration	Indication	Physician
T. Agmaxin	Digoxin	0.25mg	1/2 - 0 - 0	4 months	Heart failure	Dr. XYZ
Dytax plus	Espironolactone + Furosemide	5mg + 10mg	BD	4 months	Diuresis	Dr. XYZ
Febuxostat		40mg	OD	4 months	Uric acid accumulation	Dr. XYZ
Ultracet semi	Acetaminophen + Tramadol	32.5mg + 18.75mg	1-1-1	4 months	Pain	Dr. XYZ



OVER-THE COUNTER MEDICATION HISTROY

Name/ strength	Generic	Directions	Duration	Indication	Effectiveness
Nil	Nil	Nil	Nil	Nil	Nil

MEDICAL HISTORY:

Medical condition	Duration	Control of illness (lab values if any)
CML - Accelerated phase Hypertension	20yrs above	Nil

Note: Family history etc.DiabetesHypertension**SOCIAL HISTORY**

Nicotine use	✓	Never	
Alcohol		Never	✓
Caffeine (Tea/ Coffee)	✓	Never	
Dietary habits		Veg	✓ N.Veg
Meals per day	No	Dietary restrictions (if any):	

Other information/ Comments:

→ Clonidine + Nebivolol : Clonidine , Nebivolol either increases toxicity of others by unspecified interaction mechanism.

→ Nebivolol + Digoxin : Nebivolol , Digoxin either increases toxicity of other by unspecified reaction mechanism .

**Name & Signature of Student:**Angelin Jaimon**Name & Signature of Preceptor:**Angelin

NIRMALA COLLEGE OF PHARMACY, MUVATTUPUZHA



FIELD WORK REPORT IV PHARM D

Submitted by

Dona Basil

Parvathy B Nair

Pooja Raj A B

Shefin Siby

Siyana Rahim



DRUG INFORMATION QUERY-I

AIM

To answer the given drug information query using modified systematic approach.

QUERY

Dr. DS is a consultant physician in a multispeciality hospital. He calls the Drug Information Centre of the hospital to modify the treatment in one of his patients.

Patient is a 45 year old woman, she is taking olanzapine 10mg daily for Schizophrenia. Patient has type 2 DM which is managed by diet alone. After 6 weeks of starting olanzapine, patient noted deterioration in blood glucose level control. Her Fasting Blood Glucose level before treatment was generally started in the range 105mg/dl. But now its increased to 130mg/dl. Patient has gained 2.5kg weight since olanzapine was started. Doctor wants to know whether olanzapine is likely to have worsened the diabetic control and if so which alternative antipsychotic drug may be used.

PROCEDURE

Step 1 : Record the demographics of the enquirer.

Date of enquiry : 7-9-2018

Name of enquirer : Dr. DS

Professional status : Consultant Psychiatrist

Step 2 : Obtain the background information

Purpose of enquiry : For clinical application



Time limit for answering the query: Not mentioned

Patient is 45 years old woman, she is taking olanzapine 10mg daily for Schizophrenia. Patient has type 2 DM which is managed by diet alone. After 6 weeks of starting olanzapine, patient noted deterioration in blood glucose level. Her fasting blood glucose level before treatment was started generally in the range 105mg/dl, but now is increased to around 130mg/dl. Patient has gained 2.5kg since olanzapine was started.

Step 3 : Determine and categorize the ultimate question.

Question: Whether olanzapine affects diabetic control and lead to weight gain.

Category: ADR type query



Step 4 : Develop search strategy and conduct search

Since it is an ADR type question, different drug information handbook like ADRIS handbook drug information, drug information database like Lexicomp, different references on ADR may be searched.

Step 5 : Perform evaluation, analysis and synthesis

According to 'Clinical Pharmacy and Therapeutics' by Roger Walker and Cole Wittersea 5th edition

Antipsychotic drug Olanzapine does not have direct effect on blood glucose and food metabolism, associated with loss of control of food intake. They cause weight gain, also increases incidence of DM.

Olanzapine doesn't show imbalance in blood glucose level and no weight gain in normal doses. Also Haloperidol can be used, which does not produce either of this.

According to "Drug Information Handbook" by Lexicomp by 11th edition, Olanzapine when used in psychotic patient produce weight gain and DM. As per this reference, Quetiapine is also found to produce weight gain, but haloperidol is safer alternative.

According to "Complete Drug Reference" by Martindale, Olanzapine was found to produce weight gain and DM, but haloperidol or lisdifenazide can be suggested.

According to 'Essentials of Medical Pharmacology' by K D Tripathi 6th edition Olanzapine produced weight gain and DM and can be replaced with haloperidol and lisdifenazide.

While researching pubmed using Mesh terms "Antipsychotic", "weight gain", using Boolean operator 'AND' following article were retrieved.

"Second generation antipsychotic and metabolic effect a comprehensive literature review" from the journal "CNS Drugs 2005, 19th supplement 1; 1-93"; Clozapine and Olanzapine treatment are associated with greatest risk of clinically significant with other agent producing relatively lower values of risk.

Risperidone, Quetiapine, Amisulpride, Zolopine, generally show low to moderate level of mean weight gain and moderate risk of clinically significant increase in weight.

Ziprasidone, Aripiprazole treatment generally associated with minimal mean weight and lowest risk of more significant increases

Step 6: Formulate and provide the response

As per the evaluation of analysis, we can conclude that weight gain in diabetes is caused by olanzapine and can be replaced with second generation alternatives like Ziprasidone, Aripiprazole, Risperidone,

Quetiapine, Amisulpride. of first generation agents like haloperidol, risperidone.

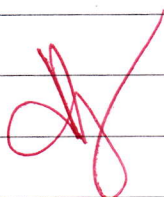
Step 7: conduct follow up and documentation
Follow up and documentation done.

REPORT

The given drug information query was answered.

REFERENCE

1. Clinical Pharmacy and Therapeutics by Roger Walker 5th ed, pg no: 483-486
2. Lexicomp Drug Information Handbook 11th ed, pg. no: 673--
3. Complete Drug Reference by Martindale 33rd ed, pg no: 1710, 693, 686



7/10



DRUG INFORMATION QUERY-IIAIM

To answer the given drug information query using modified systematic approach.

QUERY

Dr. Alice is a gynecologist in a multispecialist hospital. She calls the DIC to get advice regarding therapy in a woman. Patient is a 28 years old female with bipolar disorder, taking lithium 300mg prophylaxis to prevent further occurrence of bipolar disorder. She has decided to have a child and is concerned about birth defect due to lithium during pregnancy. Dr. wants to know whether there are any risk associated with lithium treatment during pregnancy. If so how can it be minimised.

PROCEDURESTEP 1: Secure demographic details

Date of enquiry :

Name of enquirer : Dr. Alice

Professional status : Gynecologist

STEP 2: Obtain background information

Purpose of enquiry : For clinical application

Timelimit for answering query : Not mentioned

Patient is a 28 years old female with bipolar disorder; taking lithium 300mg prophylaxis to prevent further occurrence.

she has decided to have a child and is concerned about birth defect due to lithium during pregnancy



STEP 3: Determine and categorise ultimate question

Question : What are the risk associated with lithium treatment during pregnancy. How can it be managed?

category : ADR type

STEP 4: Develop search strategy and conduct search.

Since it is an ADR-type question, different drug information handbook like AHFS handbook, drug information database like Lexicomb, different references on ADR may be searched

STEP 5: Perform evaluation, analysis and synthesis

While searching PubMed with MESH terms "Bipolar disorder", [pregnancy OR obstetrics OR gestation], "Lithium compound", ["birth defect" OR teratogenicity OR "congenital abnormality"] using boolean operators AND and OR following article was retrieved;
'Lithium exposure during pregnancy and postpartum period : A systematic review and meta analysis of safety and efficacy outcomes'; 2019

Lithium exposure during first trimester of pregnancy was significantly associated with increased risk of spontaneous abortion. It also showed increased risk of congenital anomaly and cardiac anomalies like cardiotoxicity and Ebstein's anomaly.

'Lithium use in pregnancy and risk of cardiac malformation' also associated maternal use of lithium during first trimester was associated with an increased risk of cardiac malformations. a right ventricular outflow tract obstruction.

STEP 6:

Formulate and provide response:

Pregnancies in women

New England Journal of Medicine

"Lithium use in pregnancy and risk of cardiac malformations"
From this observational study support, there is a modest increase in the risk of cardiac malformations in infants associated with lithium use in pregnancy.

International Journal of Bipolar disorder

"Lithium during pregnancy and after delivery: a Review"
Fetal anomaly ultrasound offered at 20 weeks gestational age.
Lithium exposure during 1st trimester is associated with congenital malformations. Tapering of lithium during pregnancy 1st trimester should be considered but weighed against risks of relapse.

Step 6: To formulate and provide response

As per the evaluation analysis, we can conclude that the risk associated with lithium exposure during pregnancy is higher during 1st trimester. Ideally pregnancy should be planned during remission from bipolar disorder. Lithium exposure during pregnancy is associated with congenital abnormality, cardiac malformation. If lithium is prescribed, it should be done with lowest therapeutic range, throughout pregnancy.

REPORT

The given drug information query was answered.



REFERENCE

1. Primary resource: American Journal of Psychiatry, Systematic review and meta analysis.
2. Secondary resource: New England Journal of Medicine.
3. Primary resource: Lithium during pregnancy, after pregnancy.

7/10

A





NIRMALA COLLEGE OF PHARMACY

DEPARTMENT OF PHARMACY PRACTICE

Phone: 0485-2830666, email: dic@nirmalacp.org

Case No:

CASE REPORT FORM

Patient Name <u>MA X</u>		Sex <u>M</u>	Age <u>49</u>																		
Department <u>Psychiatry</u>	IP Number <u>2520191</u>	Ht.	Wt.																		
Consultant Doctor		DOA <u>24-1-20</u>	DOD <u>6-2-20</u>																		
CHIEF COMPLAINTS: <u>chronic use of alcohol in dependence patient</u>																					
Social Hx: <u>Alcoholic</u> (Smoking/Alcohol/food habits/ exercise)		Allergy history: <u>Nil</u>																			
HISTORY OF PRESENT ILLNESS: <u>Nil</u>																					
MEDICAL HISTORY: (Name of disease, Duration of illness & current status of illness with lab values if any) <u>Type 2 DM</u>																					
MEDICATION HISTORY: (Name of the medication, Dose, Frequency, and Duration) <u>T. Metformin 500mg OD</u> <u>T. Glimepiride 2mg BD</u>																					
FAMILY HISTORY:																					
GENERAL EXAMINATIONS: Physical Examination & Systemic Examination																					
Date →	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9				
Temp	N	N	N	N	N	N	N	CVSN	N	N	N	N	N	N	W	N	N	N			
BP	120/80	120/90	110/80	120/80	N	N	N	CNS	N	N	N	N	N	N	N	N	N	N			
PULSE	22	22	22	24	22	24	22	RS	N	N	N	N	N	N	N	N	N	N			
RR	84	86	80	80	76	82	80	PA	84	82	84	80	80	82	80	82	84	80			
PROVISIONAL DIAGNOSIS:																					
LAB INVESTIGATION:																					
PARAMETERS		OBSERVED VALUE				OBSERVED VALUE															
		25/1	3/2			25		31	1	2	3	4									
CBC				BLOOD SUGAR:		188							119	164		400					
Hb (M-14-16, F-13-15 gm)		14.4		15.2		RBS: 80-140 mg/dl		231		312	364	183	192	78							
WBC 4000-11000 Cells/cmm		10,400				FBS:															
DC:						PPBS:															
N: 40 - 80%		71.1				RFT		25/1													
E: 1 - 6%		2.1				BUN: 7-18 mg/dl		14													
B: 1 - 2%						Creatinine: 0.6-1.4 mg/dl		0.9													
L: 20 - 40%		27.1				Sodium: 134-144 mmol/lit															
M: 2 - 10%		2,10,000				Potassium: 3.5-5.0 mmol/lit															
Platelet count: 1.5-4.0 L/mm ³						Chloride: 98-102 mmol/lit															
LFT:		25/1				Bicarbonate: 21-28 mmol/lit															
Bilirubin (T): 0.3-1.2mg/dl		1.3				LIPID PROFILE															
Bilirubin (DIR): 0.1-0.3mg/dl		0.8				Cholesterol <200 mg/dl															
SGPT: 30-65 U/L		40				LDL <100 mg/dl															
SGOT: 15-37 U/L		28				HDL >50 mg/dl															
Total protein: 6.4-8.2 g/dl		65				TG <150 mg/dl															
Alk.phos: 50-136 U/L		118				CRP															
Globulin: 2-3 g/dl		25																			
Albumin: 3.5-5.2 g/dl		4																			

Ala

11



OTHER TESTS (If any)

FINAL DIAGNOSIS: A case of alcohol dependent syndrome, nicotine dependence syndrome, marital discord, type 2 DM

S.No	DRUGS	FREQUENCY	date ⇒	DURATION																
				24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9
1.	Losazepam	1mg IV HS		+	+	+	+	+	+	+	+	+								
2.	T. Acamprol	333mg 2-1-1		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
3.	T. Bernalgis	100mg B.D		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	X	X
4.	T. Zesodo S	1-0-1 oral		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.	Bupropion	oral BD 150mg		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6.	T. Pantocid	40mg OD		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7.	Melformin	500mg OD		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8.	T. Ativan	2mg TID					X	X	X	X	X	X	X	X	X	X	X	X	SOS	
9.	Tryptomer	25mg OD																X	X	
10.	T. Sledon	1mg OD																X	X	
11.	Glimperide	2mg OD		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12.																				
13.																				
14.																				
15.																				
16.																				
17.																				
18.																				
19.																				
20.																				

Discharge Medication

S. No	Drug	Frequency/ Duration	S. No	Drugs	Frequency/ Duration
1.	T. Acamprol 333mg	2-1-1 } 1 week	13.		
2.	T. Bernalgis 100mg	1-0-0	14.		
3.	T. Glimperide 2mg	1-0-0	15.		
4.	T. Metformin 500mg	1-0-1	16.		
5.	Bupropion SR 150mg	1-0-1	17.		
6.	T. Zesodo S	1-0-1	18.		
7.	T. Pantocid 40mg	1-0-0	19.		
8.	T. Sledon 1mg	0-0-1	20.		
9.	T. Tryptomer 25mg	0-0-1	21.		
10.	T. Ativan 2mg	SOS	22.		
11.			23.		
12.			24.		



PHARMACISTS INTERVENTION

Bupropion - dispendone - may ↑ risk of seizure, In addition bupropion
 ↑ blood level of dispendone.
 Amitriptyline - bupropion - ↑ risk of seizure ↑ blood level of amitriptyline

Name & Signature of Pharm.D Student	Name Dona Basil	Signature
Batch: PHARM D		
Year: IV		



NIRMALA COLLEGE OF PHARMACY
DEPARTMENT OF PHARMACY PRACTICE
 Phone: 0485-2830666, email: druginfo@nccp@gmail.com

MEDICATION ERROR REPORT FORM

Initial: <u>MA X</u>		Age: <u>72</u>		Sex: M/F					
DOA: <u>N</u>		IP/OP No.: <u>R18770</u>		Dept: <u>Medical ward</u>					
Diagnosis: <u>Febrile neutropenia, UTI, anemia, Sepsis</u>									
Medication error Date:				Date/Time error found: <u>N/A</u>					
Date of recovery:									
Error Reported by (Name & Designation): <u>Pharmacy student, Dona Basil</u>									
Error Occurred at:		Hospital		☒ Outpatient					
		Community pharmacy		Patient's Home					
Did the error reach the patient ☒ Yes ☐ No									
People involved in the error:		Physician	☒ Pharmacist	Nurse	Patient				
					Bystander				
TYPE OF MEDICATION ERROR FOUND/ REPORTED									
Prescribing error	Drug use without indication	Dispensing error	Wrong drug	Administration error	Medication given without an order				
	Incorrect drug selection ☒		Wrong strength		Charted incorrectly and given				
	Wrong dosage form		Drug Expired		Charted incorrectly and not given				
	Wrong dose ☒		Mislabeled		Wrong time				
	Wrong frequency		Wrong dosage form		Wrong frequency				
	Wrong duration		Wrong Patient		Wrong/Inappropriate route				
	Illegible prescription				Wrong dose				
	Drug/class duplication				Compliance error				
	Monitoring error				Drug Expired				
	Drug interaction				Drug interaction				
Omission error									
Medication error resulted In									
"Near miss" error		Error, no reaction		Description of reaction					
Error, no apparent reaction		Error, reaction, no medical treatment required		☒ Patient developed drug related Fancow syndrome					
Error, reaction, medical treatment required									
Suspected Medication involved in the error									
Name (brand and/or generic name)	Manufacturer (If known)	Batch No. / Lot No. (If known)	Exp. Date (If known)	Dose used	Route used	Frequency	Therapy dates (if unknown, give duration)		Reason for Use or prescribed for
							Date started	Date stopped	
<u>Gentamycin</u>				<u>160mg</u>	<u>IV</u>	<u>B-D</u>	<u>10/11/19</u>	<u>19/11/19</u>	<u>Febrile neutropenia</u>
Authorities Informed									
Physician notified:		Name and signature of physician:							
Pharmacist notified:		Name and signature of pharmacist:							
Nurse notified:		Name and signature of nurse:							
Was Patient Counseling provided		Before Error				After Error			
Suggest any recommendations to prevent recurrence of the error: <u>Avoid use of aminoglycoside to this patient</u>									
Name and signature of person filling out report: <u>Dona Basil</u>					Name and signature of preceptor: <u>[Signature]</u>				





NIRMALA COLLEGE OF PHARMACY
DEPARTMENT OF PHARMACY PRACTICE
Phone: 0485-2830666, email: druginfo@nirmalacp.org

PATIENT HISTORY INTERVIEW - FORM

PATIENT DETAILS

Initial: Ma. X	IP/OP no.: 1423	Date of admission: 2-12-23
Age: 82	Sex: M/F	Social status:
	Height: Nil	Weight: Nil
		BMI: Nil Nil
Pregnant: Y/N	Breast Feeding: Y/N	Allergies: Food/Drug/Environment: Nil

PSYCHOSOCIAL ASSESSMENT

Living Situation	Normal	On bed rest	✓
	Physically Challenged	Support System	
Family Status	Single	Nuclear Family	✓
	Children	Combined Family	
Educational Status			
Treatment/Follow -Up	Compliant		✓
	Non-compliant (reason)		

PRESCRIPTION MEDICATION HISTORY

Name	Generic name	Strength	Directions	Duration	Indication	Physician
T-lanoxin	Digoxin	0.25mg	0.5-0-0	4 months	Heart failure	Dr. Biju
Dytos plus	Spironolactone + Rosemide	50mg + 40mg	B.D	1 month	Diuresis	
Febuxostat		40mg	OD	4 month	Gout acid accumulation	
Ultracel Semi	Acetaminophen + Tramadol	162.5mg	1-1-1	1 month	Pain	



OVER-THE COUNTER MEDICATION HISTROY

Name/ strength	Generic	Directions	Duration	Indication	Effectiveness
Nil	Nil	Nil	Nil	Nil	Nil

MEDICAL HISTORY:

Medical condition	Duration	Control of illness (lab values if any)
PMH, Accelerated Phase Hypertension	20 yrs	

Note: Family history etc. Diabetes

SOCIAL HISTORY

Nicotine use	☒	Never	
Alcohol		Never	☒
Caffeine (Tea/ Coffee)		Never	
Dietary habits		Veg ☒	N.Veg
Meals per day		Dietary restrictions (if any):	

Other information/ Comments:

Clonidine + Nebivolol - Clonidine, Nebivolol either ↑ toxicity of other by unspecified interaction

Nebivolol + Digoxin - Nebivolol, digoxin, either ↑ toxicity of other by unspecified reaction mechanism



Name & Signature of Student:

Dona Basil

Name & Signature of Preceptor:

NIRMALA COLLEGE OF PHARMACY, MUVATTUPUZHA



FIELD WORK REPORT IV PHARM D

Submitted by

Elmy Issac John

Sneha Roy

Sona Vincent

Sreelakshmi Sreekumar

Stebin Mathew



DRUG INFORMATION QUERY - IIAIM:

To answer the given drug information query using modified systematic approach

QUERY:

Dr. Alice is a gynaecologist in a multispeciality hospital. She calls to a drug information centre to get advice regarding therapy in a woman.

Patient is a 28 year old female with bipolar disorder - taking lithium 300 mg for prophylaxis to prevent further occurrence of bipolar disorder. She has decided to have a child & she is concerned about the birth defect due to lithium during pregnancy. Doctor wants to know whether there any risk associated with lithium treatment during pregnancy & if so how it can be minimised.

PROCEDURE

Step 1: Secure the demographics of the enquiry.

Date of enquiry : 13/03/2023

Name of enquirer : Dr. Alice

Professional Status : Consultant gynaecologist



Step 2: Obtain the background information

Purpose of Enquiry: For clinical application

Time limit for answerable query: Not mentioned

Patient is a 28 year old with bipolar disorder taking lithium 300 mg for prophylaxis to prevent further occurrence of bipolar disorder. She has decided to have a child & she is concerned about the birth defect due to lithium during pregnancy. Doctor wants to know whether there are any risk associated with lithium treatment during pregnancy and if so how it can be minimised.

Step 3: Determine and categorise the ultimate question

Question: Whether lithium uptake during pregnancy cause birth defect and if so how to minimise them.

Category: ADR type Query

Step 4: Develop search strategy and conduct search

Researching pubmed using Mesh terms lithium, "lithium carbonate", pregnancy, "birth defects", "bipolar disorder" along with boolean operators "AND", "OR"



Step 5: Perform Evaluation, analysis and synthesis

While researching PubMed using Mesh terms lithium, "lithium carbonate", pregnancy, "gestation", "birth defects", "congenital abnormalities", "bipolar disorder" along with boolean operators "AND", "OR" following article was retrieved.

Maximum Recommended Dosage of lithium for Pregnant Women Based on a PBPK Model for lithium Absorption.

Step 5: Formulate and provide the response
 As per evaluation of analysis, the lithium dose that is considered to be safe is 4.00 mg 3 times a day with folic acid supplementation 5mg in order to reduce the risk of congenital heart disease.

Step 6: Formulate and provide the response

As per evaluation of analysis, the lithium dose that is considered to be safe is 4.00 mg 3 times a day with folic acid supplementation 5mg in order to reduce the risk of congenital heart disease.



Step 7: Develop search strategy and conduct search
 Researching problem using best terms "lithium", "bipolar disorder", "birth defects", "pregnancy", "congenital heart disease", "folic acid", "AND", "OR".

Step 8: Perform literature search
 While searching PubMed using the terms "lithium", "bipolar disorder", "birth defects", "pregnancy", "congenital heart disease", "folic acid", "AND", "OR".

Step 9: Formulate and provide the response
 As per evaluation of analysis, the lithium dose that is considered to be safe is 4.00 mg 3 times a day with folic acid supplementation 5mg in order to reduce the risk of congenital heart disease.

Treatment of bipolar disorder with lithium therapy during pregnancy is a medical challenge. Lithium being drug of choice has been classified as a class D drug (legal to use during pregnancy, but may cause birth defects) and is one of only thirty known teratogenic drugs.

Maximum dosage regimen suggested by the PBPK model by, maximize conc. of lithium in mother's brain, while maintaining fetal conc. low enough to reduce risk of birth defects.

The dosage regimen was 400 mg lithium 3 times per day. Folic acid supplementation in combination with mood stabilizers is also addressed. Folic acid - 5 mg can be given as supplement in order to reduce the risk of congenital heart disease.

Step 7: Conduct Follow up and documentation
Follow up and documentation done



REPORT: The given drug information query was answered.

REFERENCE:

- (i) Kennedy MH. Medication management of bipolar disorder during the reproductive years. Ment. Health Clinic 2018 Mar. doi: 10.9740/mhc.2017.11.255.
- (ii) Horton S, Guek A, Cook D, Goo J, Phurjati P. Maximum Recommended Dosage of lithium for Pregnant women based on a PBPK Model for lithium Absorption. Adv. Bioinformatics. 2012; 2012: 352729. doi: 10.1155/2012/352729

CASE REPORT FORM

Patient Name	Mr. X	Sex	M	Age	72										
Department	Medical ward	IP Number	Ht.	Wt.											
Consultant Doctor		DOA	8-11-2019	DOD	22-11-19										
CHIEF COMPLAINTS: Fatigue, Breathlessness, fever															
Social Hx: (Smoking/Alcohol/food habits/ exercise)	Nil	Allergy history:	Nil												
HISTORY OF PRESENT ILLNESS:															
MEDICAL HISTORY: (Name of disease, Duration of illness & current status of illness with lab values if any) carcinoma Right lung															
MEDICATION HISTORY: (Name of the medication, Dose, Frequency, and Duration) Nil															
FAMILY HISTORY: Nil															
GENERAL EXAMINATIONS: Physical Examination & Systemic Examination															
Date=>	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Temp	99.8	99.8	100	100	99	99	99.2	101	101	99.6	101.2	101	99	100	N
BP	60/40	94/60	130/80	110/40	140/90	130/90	120/80	140/90	120/80	140/90	120/80	140/80	140/80	120/80	110/80
PULSE	108	98	100	100	90	80	88	102	106	74	82	92	90	103	82
RR	22	30	22	24	22	22	20	24	26	22	22	22	22	24	22
PROVISIONAL DIAGNOSIS:															
LAB INVESTIGATION:															
PARAMETERS	OBSERVED VALUE		OBSERVED VALUE		OBSERVED VALUE										
CBC Hb (M-14-16, F-13-15 gm) • WBC 4000-11000 Cells/cmm DC: N: 40 - 80% E: 1 - 6% B: 1 - 2% L: 20 - 40% M: 2 - 10% Platelet count: 1.5-4.0 L/mm³	8		2.1 lakh		BLOOD SUGAR: RBS: 80-140 mg/dl FBS: PPBS: RFT BUN: 7-18 mg/dl Creatinine: 0.6-1.4 mg/dl Sodium: 134-144 mmol/lit Potassium: 3.5-5.0 mmol/lit Chloride: 98-102 mmol/lit Bicarbonate: 21-28 mmol/lit										
LFT: Bilirubin (T): 0.3-1.2mg/dl Bilirubin (DIR): 0.1-0.3mg/dl SGPT: 30-65 U/L SGOT: 15-37 U/L Total protein: 6.4-8.2 g/dl Alk.phos: 50-136 U/L Globulin: 2-3 g/dl Albumin: 3.5-5.2 g/dl	1.1 mg/dl 0.5 mg/dl 19 u/L		mea		8/11 14/11 CRP :- On 10th - 260.07 14th - 154 17th - 128										

Urine R/E (9-11-19)

Albumin - Trace

Sugar - Nil

Micro pus cells - 30-35

Micro Epi cells - occ.

Micro RBC - 1-2

urine culture on 11-11-19 → No growth
Report

Stool R/E on 19-11-19 → 0-2 pus cells, 1-2 RBC cells

Stool R/E (18-11-19)

1-2 pus cells

20-25 RBC cells

undigested veg matter

occult blood ++

Date	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Hb g%	8.1	9.4	8.9	7.7	9.3	9.1	10.5	10.3	10	9.9	9.8	9.6			9.3
Na ⁺	126	130	130	132		135							128	130	
K ⁺	3.6	3.9				2.1	2.1	2.1	2.5	2.3	2.3	2.3	2.5	3.5	3.7
S. Creatine	1.3			1.1		1.3		1	1			1	0.9		
TC	2400		1200	800	1400	6100	10000					10,400			
N	29%		52%	25%	41%	62%	53%					29%			
L	19%		40%	22%	59%	34%	42%					21%			
E	2%		2%	3%			1%								
M						4%	4%								
Mg ²⁺															0.6
HCO ₃ ⁻															18



ANC → On 10th 700 cells/cumm

On 11th 200 cells/cumm

Troponin → On 8th 112.9 mg/L

ECG Report on 8/11 - SVT

Chest X Ray → Rt. side consolidation

FINAL DIAGNOSIS: Aminoglycoside induced PCT toxicity induced fanconi syndrome, Type II RTA Febrile Neutropenia, UTI, Sepsis, Anemia, Septic shock, Refractory hypokalemia, SVT, GI bleed, diarrhoea

S.No	DRUGS	FREQUENCY	date ⇒	DURATION																
				8	9	10	11	12	13	14	15	16	17	18	19	20	21			
1.	Inj. Digern	5mg Stat		✓																
2.	Inj. Sulwak	500 mg + 1000mg		✓	✓															
3.	Inj. Pantop	40 mg IV OD		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
4.	Inj. Pmol	2cc q8hr SOS		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
5.	IVF DNS 500ml + Klybim			✓													✓			
6.	Inj. Hydrocort	100 mg/5ml stat		✓			✓													
7.	3% saline	100 ml over 10hr		✓	✓	✓														
8.	Packed cell transfusion	1 pint over 4hr			✓	✓		✓												
9.	Inj. Dexona	4mg Stat			✓			✓												
10.	Neb. budamete	5mg BD		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
11.	Neb. Ipratvent	500mg BD		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
12.	Inj. Tazomec	4.5g q8hr				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
13.	T. Itraconazole	100 mg BD				✓	✓	✓									✓	✓		
14.	T. Hyponat O	15mg (1-0-0)				✓	✓													
15.	Inj. Gentamycin	160mg BD				✓	✓	✓	✓	✓	✓	✓	✓							
16.	Inj. Tranostat	100 mg/5ml q8hr				✓	✓	✓	✓	✓	✓	✓	✓							
17.	Inj. Perinorm	5mg/2ml					✓													
18.	Inj. Etamsylate	2mg/2ml					✓													
19.	Inj. Periset	250mg/2ml					✓													
20.	Syr. Macralfate O	1tsp 1-1-1						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			

Discharge Medication

S.No	Drug	Frequency/ Duration	S.No	Drugs	Frequency/ Duration
1.	T. Dolo	650 mg 1-1-1 (4 days)	13.		
2.	T. Remmag 400mg	BD	14.		
3.	Syr. Macralfate O	1tsp 1-1-1 (1 week)	15.		
4.	C. Pantocid DSR	1-0-0 (1 week)	16.		
5.	C. Abphyllin 100mg	BD (1 week)	17.		
6.	C. Redatil	100mg SOS	18.		
7.	T. Addkay 750mg	BD (1 week)	19.		
8.	T. Magnesium	BD (1 week)	20.		
9.	T. Acidose	500mg (2 week)	21.		
10.	Neb. Budamata	BD (1 week)	22.		
11.	Neb. Ipratvent	BD (1 week)	23.		
12.			24.		



PHARMACISTS INTERVENTION

Drug-Drug Interactions

Tolvaptan - Itraconazole → serious nervous system side effects, difficulty in swallowing, trouble speaking, seizure, coma.

Itraconazole - budenonide → side effects like swelling, weight gain, depression, acne, muscle weakness.

Name & Signature of Pharm.D Student	Name	Signature
Batch: PHARM D Year: 4 th year	Elmy Issac John	

Drug	freq. & Dose	Date
Inj. Lupifil	300 mcg / 0.5ml OD	10, 11, 12
C. Yogut	1-0-1	13, 14, 15, 16, 17, 18, 19, 20, 21
C. Redofil	100mg BD	13, 14, 18, 19
1 pint NS + KCl over 5hr		13
IVF 1 pint NS MgSO ₄	2amp (1amp over 4hr)	14, 15
T. Mucinal	600mg BD	18, 19
500ml NS 2amp KCl	over 5hr	15, 16, 17, 18, 19, 20, 21
IVF DNS		13, 16, 17, 20
Katamol Infusion	1000 mg	16, 17, 18
100ml NS + 10CL KCl over 2hr	1-1-1	11, 20
Inj. Metronidazole	500mg 1-1-1	20
TUSQ lozenges	1-0-1	16, 17, 18, 19, 20, 21
Inj. Magnova	1.125g BD	16, 17, 18, 19, 20, 21
T. Addkay	750mg 1-1-1	19, 20
T. Sorbitrate	2.5mg S/L	19, 20, 21, 22
		20



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NIRMALA COLLEGE OF PHARMACY
DEPARTMENT OF PHARMACY PRACTICE
Phone: 0485-2830666, email: druginfoncp@gmail.com

MEDICATION ERROR REPORT FORM

Initial: Mrs. X	Age: 90 yrs	Sex: M/F
DOA:	IP/OP No.: 142280	Dept: ortho Dept.
Diagnosis: Or Proudure femoral fracture		
Medication error Date:		Date/Time error found: 6-11/19
Date of recovery:	Nil	
Error Reported by (Name & Designation): Elmy Issac John Pharmacy student		
Error Occurred at:	Hospital ☒	Outpatient ☐
	Community pharmacy ☐	Patient's Home ☐
Did the error reach the patient ☐ Yes ☒ No		
People involved in the error:	Physician ☒	Pharmacist ☐ Nurse ☐ Patient ☐ Bystander ☐

TYPE OF MEDICATION ERROR FOUND/ REPORTED

Prescribing error	Dispensing error	Administration error
Drug use without indication		Medication given without an order
Incorrect drug selection		Charted incorrectly and given
Wrong dosage form		Charted incorrectly and not given
Wrong dose		Wrong time
Wrong frequency	☒	Wrong frequency
Wrong duration		Wrong/Inappropriate route
Illegible prescription		Wrong dose
Drug/class duplication		Compliance error
Monitoring error		Drug Expired
Drug interaction		Drug interaction
Omission error		

Medication error resulted In

"Near miss" error	Error, no reaction	Description of reaction
Error, no apparent reaction	Error, reaction, no medical treatment required	
Error, reaction, medical treatment required		

Suspected Medication involved in the error

Name (brand and/ or generic name)	Manufacturer (If known)	Batch No. / Lot No. (If known)	Exp. Date (If known)	Dose used	Route used	Frequency	Therapy dates (if unknown, give duration)		Reason for Use or prescribed for
							Date started	Date stopped	
Cefuroxime	Nil	Nil	Nil	1.5g	IV	Q12Hr	5-11-19	16-11-19	Bacterial infection

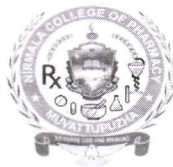
Authorities Informed

Physician notified:	Name and signature of physician:	Nil
Pharmacist notified:	Name and signature of pharmacist:	Nil
Nurse notified:	Name and signature of nurse:	Nil
Was Patient Counseling provided	Before Error	After Error

Suggest any recommendations to prevent recurrence of the error: In case of surgical prophylaxis 1.5g IV cefuroxime is administered upto 30min before procedure then 250mg every 8 hrs upto 3 doses

Name and signature of person filling out report: Elmy Issac John	Name and signature of preceptor:
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Phone: 0485-2830666, email: druginfoncp@nirmalacp.org

PATIENT HISTORY INTERVIEW - FORM

PATIENT DETAILS

Initial: <u>George John</u>	IP/OP no.: <u>2311866</u>	Date of admission: <u>6-2-2020</u>
Age: <u>73 yrs</u>	Sex: <u>M</u>	Social status: <u>Married</u>
	Height: <u>Nil</u>	Weight: <u>Nil</u>
		BMI: <u>Nil</u>
Pregnant: <u>Y/N</u>	Breast Feeding: <u>Y/N</u>	Allergies: Food/Drug/Environment: <u>NA</u>

PSYCHOSOCIAL ASSESSMENT

Living Situation	Normal	☒	On bed rest	
	Physically Challenged		Support System	
Family Status	Single		Nuclear Family	
	Children		Combined Family	☒
Educational Status	<u>farmer</u>			
Treatment/Follow -Up	Compliant			☒
	Non-compliant (reason)			

PRESCRIPTION MEDICATION HISTORY

Name	Generic name	Strength	Duration Directions	Direction Duration	Indication	Physician
<u>P. Glycozet</u>	<u>glimepiride 1mg</u>	<u>1mg</u>	<u>1-0-1 B/F</u>		<u>Antihyperglycemic</u>	<u>Dr. Biju</u>
<u>T. Roseday</u>	<u>Metformin 500mg</u>	<u>500mg</u>	<u>0-0-1</u>		<u>DLP</u>	<u>Dr. Biju</u>
<u>T. Tigatel</u>	<u>Telmisartan 40mg</u>	<u>40mg</u>	<u>1-0-0</u>		<u>Antihypertensive</u>	<u>Dr. Biju</u>
<u>T. Quetiopin</u>	<u>Amlodipine 5mg</u>	<u>5mg</u>	<u>1-1-2</u>		<u>Dementia</u>	<u>Dr. Biju</u>
<u>T. Clozapine</u>	<u>Quetiopin</u>	<u>25mg</u>	<u>H.S</u>		<u>Antipsychotic</u>	<u>Dr. Biju</u>
<u>T. Zolcalm</u>	<u>Clozapine</u>	<u>25mg</u>	<u>0-0-1</u>		<u>Sedative</u>	<u>Dr. Biju</u>
	<u>Zolcalm</u>	<u>5mg</u>	<u>0-0-1</u>			



OVER-THE COUNTER MEDICATION HISTROY

Name/ strength	Generic	Directions	Duration	Indication	Effectiveness
<u>P. Vit. D cal.</u>	<u>calcium</u>	<u>0-0-1</u>	<u>3yrs</u>	<u>Calcium Replenished</u>	<u>Nil</u>

MEDICAL HISTORY:

Medical condition	Duration	Control of illness (lab values if any)
Memory loss (3yrs) DM cryptic II) HTN Dyslipidemia	3yrs 20yrs 20yrs 20yrs	Nil

Note: Family history etc.Diabetes Mellitus**SOCIAL HISTORY**

Nicotine use	☒	Never	
Alcohol	☒	Never	
Caffeine (Tea/ Coffee)	☒	Never	
Dietary habits		Veg	☒ N.Veg
Meals per day	No	Dietary restrictions (if any):	

Other information/ Comments:

Nil



Name & Signature of Student:Shmy Desai John Shmy**Name & Signature of Preceptor:**

NIRMALA COLLEGE OF PHARMACY, MUVATTUPUZHA



FIELD WORK PHOTOS IV PHARM D





G. Boelmantur

Digitally signed by
 BADMANABAN RAMALINGAM
 Date: 2023.12.28 17:03:18
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