Reporting drug adverse reactions "pharmacovigilance unit"

Dr. Khaled sobhy



□Life threatening

☐ Congenital Anomaly

□ Other, specify -----

□ Permanent Disability

□ Patient Died

□ Prolonged Hospitalization

□ Required intervention to prevent Damage

Case Scenario

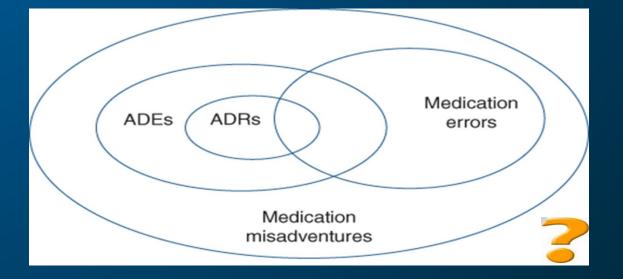
- Jane J. is a 22-year-old woman who was admitted to Community Hospital on May 24 with an exacerbation of autoimmune encephalitis and received a 5-day course of high-dose intravenous steroids. Her symptoms rapidly stabilized and improved and she was discharged on May 29. She returned to Community Hospital's outpatient infusion department later on May 30 and May 31, and on June 1 for a 3-day course of XZ Pharmaceutical's IV immune globulin, 90 grams daily.
- On June 6, Jane returned to the hospital emergency room with symptoms suggesting anemia. Lab work showed reticulocytosis, and a positive Coombs test.

Case Scenario "continued"

- Her hemoglobin was 6.3 g/dL (it had been 13.4 g/dL on a previous admission, May 24). She was admitted with a working diagnosis of acute hemolytic anemia. The physician suspects an association between her recent treatment with XZ Pharmaceutical's IV immune globulin and the anemia.
- Jane received two units of packed red blood cells on June 7. Repeat hemoglobin was 9.0 on June 8 and 9.2 on June 9. Past medical history also included diagnoses of obesity and hypertension. She was also taking atenolol, norvasc, folic acid, pantoprazole and felodipine.

Terminology

- Medication misadventure "MS" refers to any hazard associated with medications.
- Pharmacists play a pivotal role in reporting MS. Reporting MS is one of the main service of pharmacist in DIC.
- Determination of the type of MS is important in liability issues



Terminology

- All adverse drug events (ADEs), adverse drug reactions (ADRs), and medication errors fall under the umbrella of MS.
- The ADE means any body injury caused by a medicine use. It include ADRs that result in harm to a patient.
- A medication error is **any preventable event** that has the potential to lead to inappropriate medication use.
- In 1995, ADE-related costs were \$76.6 billion annually. It's estimated that 30 to 60% of ADEs are preventable.

Adverse Drug Reactions

- WHO defines an ADR as "any unintended response to a medicine which occurs at doses normally used in man.
- The ADRs include allergic or idiosyncratic reactions of drugs.
 Drug-drug interactions can also fall into the category of ADRs.
- Side effect, which is "any unintended effect of drug occurring at doses normally used by a patient related to the pharmacological properties of the drug "2 ry unwanted effects"



Give the right medical terminology

MR, ADEs, ADRs or SE



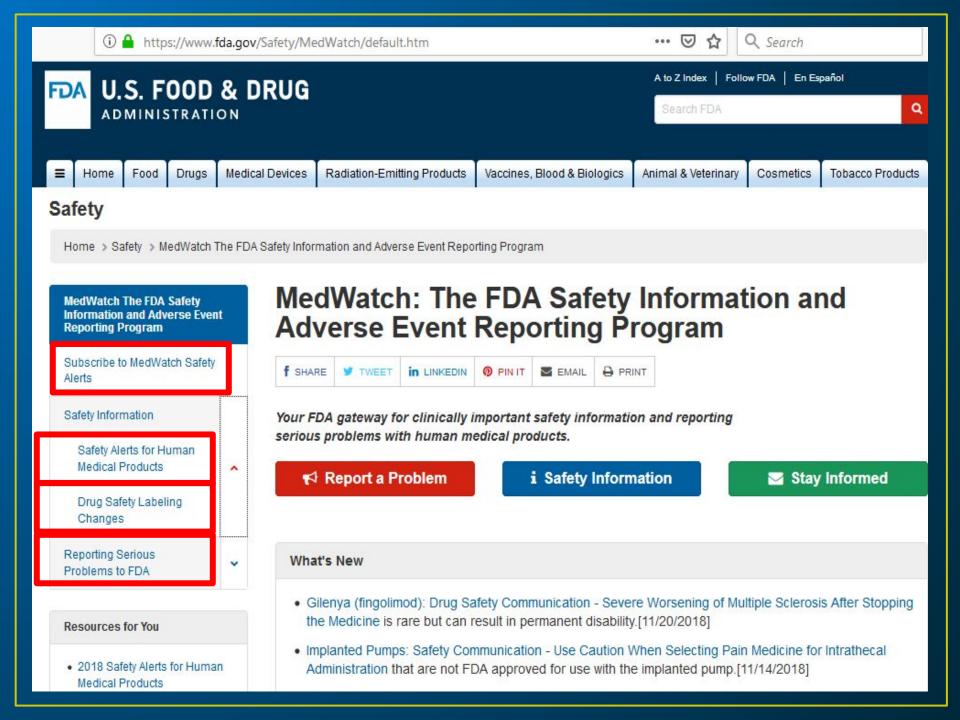
Drug-induced oral ulcers are lesions of the oral mucosa accompanied by painful symptoms, such as burning mouth, metallic taste, dysgeusia, or ageusia. This report demonstrates the first documented case of drug-induced oral ulcers with the tricyclic antidepressant nortriptyline. In this case, a 49-year-old female initiated treatment for refractory neuropathy with nortriptyline. Within 2 weeks of therapy, painful, oral, bubble-like ulcers developed. Complete symptom resolution occurred approximately 1 month after discontinuation of nortriptyline. Clinicians should be cognizant of nortriptyline's ability to potentially induce oral ulcers; however, the exact mechanism for this adverse event is unknown.

DIC Pharmacist role & ADRs

- 1-updated with recent ADRs of drug in clinical practice
 & increase medical team awareness of recent
 updates of ADRs "newsletter publications"
- 2-reporting new ADRs to EPVC and WHO
- 3-sharing in researches "epidemiology for ADRs in community"
- 4-Sharing in programs for prevention of ADRs "adding to drug label"

Resources for updates in ADRs

- The FDA Web (http://www.fda.gov/Safety/Medwatch).
- This online provide FDA's latest safety alerts and recalls.
- The site also provides monthly summaries of changes to drug labeling that the FDA made in response to reports.
- Lexicomp database also provide update in FDA safety alerts for drugs.
- This data is Important to be included in DIC newsletters



Importance of Reporting ADRs

- 1 Postmarketing Surveillance of ADRs using Well-designed programs makes it possible to detect early signals of a developing problem.
- Postmarketing ADR reporting can cause changes in prescribing drugs as well as result in the withdrawal of various drugs from the market.
- 2-Pharmacoepidmiology studies: It estimate the ADRs in the community exposed to a given used drug ""

Causality of ADRs

To detect ADR, determine the causality "the probability that a particular drug causes an adverse event".

Assessment tools for causality of ADRs

- 1-the sequential relationship between drug administration and event.
- 2-Dechallenge: did the patient improve after stopping the drug
- 3-rechallenge: the reaction appear after repeated exposure to the drug. Rechallenge is not applicable to all ADRs
- 4-The response pattern to the suspected drug
- 5-the event is not explained by patient clinical cases "condition & other concurrent drugs"

Types of probability of Adverse Drug Reactions

1-Definite ADR is a reaction which:

- Follows a reasonable temporal sequence from administration of the drug;
- Follows a known response pattern to the suspected drug; and
- •Is confirmed by dechallenge; and
- Could not be reasonably explained by the known characteristics of the patient's clinical state.

Types of probability of Adverse Drug Reactions

2-Conditional ADR is a reaction which:

- Follows a reasonable temporal sequence from administration of the drug;
- Does not follow a known response pattern to the suspected drug
- Could not be reasonably explained by the known characteristics of the patient's clinical state.

3-Doubtful ADR is any reaction that does not meet the criteria above.

MedWatch program

- In June 1993, the FDA developed a new program called MedWatch.
- The current MedWatch system allows health care providers to report suspected ADRs using FDA Form 3500.
- With this program, the FDA receives reports from health care team, health organizations and consumers "patients".
- MedWatch is interested in reports of serious ADRs, which the FDA defines as death, life threatening events, hospitalization, disability, congenital anomaly, or requiring intervention to prevent permanent impairment.

MedWatch

- Once submitted through the MedWatch system, ADR reports are received by a unit of the FDA called the Central Triage Unit which screens reports and forwards them to the appropriate FDA program within 24 hours of receipt.
- The report becomes part of a database used by the FDA to identify signals or warnings related to drug safety that require further study or regulatory action.

MEDWATCH

The FDA Safety Information and Adverse Event Reporting Program

For VOLUNTARY reporting of adverse events, product problems and product use errors

Page 1 of 3

Form Approved: OMB No. 0910-0291, Expires: 9/30/2018 See PRA statement on reverse.

FDA USE ONLY
Triage unit sequence #
FDA Rec. Date

	ots of "dd-mmm-yyyy" please use 2- igit year; for example, 01-Jul-2015.	digit day, 3-letter	r month	3. Dose or Amount	Frequency	Route		
A. PATIENT INF								
Patient Identifier		3. Sex	4. Weight	#2				
1. Patient identine		.s)	4. Weight	""				
In Confidence	or Date of Birth (e.g., 08 Feb 1925)	Male	☐ lb	4. Dates of Use (From/To give duration, or best es #1		Stopped or Dose Reduced?		
5.a. Ethnicity (Check	5.b. Race (Check all that appl	(42)			#1 Yes No Doesn't			
single best answer)		514	lative	#2				
Single best answer)			5. Diagnosis or Reason f	#2 Yes No Doesn't				
☐ Not Hispanic/Latino ☐ Native Hawaiian or Other Pacific Islander				#1				
B. ADVERSE EVENT, PRODUCT PROBLEM					10. Event Reappeared After			
	*:	:IVI		#2	Reintroduction? #1 Yes No Doesn't			
Check all that app Adverse Event		4 _		6. Is the Product	6. Is the Product 7. Is the Product Over-			
The second secon	□ Product Problem (e.g., defe or □ Problem with Different Mar		ment.	Compounded?	the-Counter?			
	ed to Adverse Event (Check all that	PROPERTY AND ADDRESS OF THE PROPERTY OF THE PR	ame Medicine	#1 Yes No	#1 Yes	No Yes No Doesn't apply		
Death Include de	ate (dd-mmm-yyyy):			#2 Yes No	#2 Yes	No		
Life-threatening	Disabilit	y or Permanent	Damage	8. Expiration Date (dd-mi	mm-yyyy)			
☐ Hospitalization — i	nitial or prolonged 🔲 Congen	ital Anomaly/Birl	th Defects	#1	#2			
Other Serious (Im	portant Medical Events)			E. SUSPECT MEDI	CAL DEVICE			
Required Interven	ntion to Prevent Permanent Impairme	ent/Damage (De	vices)	1. Brand Name				
3. Date of Event (dd-r	mmm-yyyy) 4. Date of this	Report (dd-mm	т-үүүү)					
2004	\$1618601119V2			2. Common Device Name	е	2b. Procode		
5. Describe Event, Pr	roblem or Product Use Error			†				
				3. Manufacturer Name, City and State				
				4. Model #	Lot#	5. Operator of Device		
						☐ Health		
			N	Catalog #	Expiration Dat	e (dd-mmm-yyyy) Professional Lay User/Patient		
6 Delevent Teetell of	boratory Data, Including Dates	(A)		<u> </u>	——— =·			
6. Relevant Tests/Lai	boratory Data, including Dates			Serial #	Unique Identifi	er (UDI) #		
						f Explanted, Give Date (dd-mmm-yyyy)		
		(Continue		8. Is this a single-use de				
Other Belevant His	story, Including Preexisting Medic			reprocessed and reus		☐ Yes ☐ No		
	y, smoking and alcohol use, liver/kid			9. If Yes to Item 8, Enter		of Reprocessor		
90000 500 (min) 100004 50			500	l c. ii res to item s, zinei	ramo ana Audi oss	or respirate sources.		
		(Continue	on page 3)	F. OTHER (CONCC				
C. PRODUCT A	VAILABILITY			Product names and there	apy dates (Exclude tr	eatment of event)		
2. Product Available	for Evaluation? (Do not send prod	uct to FDA)				(Continue on page 3)		
Yes No	Returned to Manufacturer	on <i>(dd-mmm-yy</i>)	vy)	G. REPORTER (Se	a panfidantiality s			
`					e connuentiality s	ection on back)		
D. SUSPECT PR	RODUCTS			1. Name and Address	1	Action Cold Action Cold Action Cold		
1. Name, Manufactur	rer/Compounder, Strength <i>(from p</i>	roduct label)		Last Name:		irst Name:		
#1 – Name and Streng	gth	#1 - NDC # o	r Unique ID	Address:				
#1 – Manufacturer/Compounder #1 – Lot #				City:		Province/Region:		
				Country:	z	IP/Postal Code:		
				Phone #:	Email:			
				2. Health Professional?	3. Occupation	4. Also Reported to: Manufacturer/		
				Yes No		Compounder		
#2 – Manufacturer/Co	mpounder	#2 – Lot #	-	5. If you do NOT want yo	ur identity disclosed	User Facility		
				to the manufacturer, plea	ase mark this box:	☐ Distributor/Importer		

PLEASE TYPE OR USE BLACK INK

ADVICE ABOUT VOLUNTARY REPORTING

Detailed instructions available at: http://www.fda.gov/medwatch/report/consumer/instruct.htm

Report adverse events, product problems or product use errors with:

- · Medications (drugs or biologics)
- Medical devices (including in-vitro diagnostics)
- Combination products (medication & medical devices)
- Human cells, tissues, and cellular and tissue-based products
- Special nutritional products (dietary supplements, medical foods, infant formulas)
- Cosmetics
- Food (including beverages and ingredients added to foods)

Report product problems - quality, performance or safety concerns such as:

- · Suspected counterfeit product
- Suspected contamination
- Questionable stability
- Defective components
- Poor packaging or labeling
- Therapeutic failures (product didn't work)

Report SERIOUS adverse events. An event is serious when the patient outcome is:

- Death
- Life-threatening
- · Hospitalization initial or prolonged
- · Disability or permanent damage
- · Congenital anomaly/birth defect
- Required intervention to prevent permanent
- impairment or damage (devices)
- Other serious (important medical events)

Report even if:

- · You're not certain the product caused the event
- · You don't have all the details

How to report:

- · Just fill in the sections that apply to your report
- Use section D for all products except medical devices
- · Attach additional pages if needed
- Use a separate form for each patient
- · Report either to FDA or the manufacturer (or both)

Other methods of reporting:

- 1-800-FDA-0178 To FAX report
- 1-800-FDA-1088 To report by phone
- www.fda.gov/medwatch/report.htm To report online

If your report involves a serious adverse event with a device and it occurred in a facility outside a doctor's office, that facility may be legally required to report to FDA and/or the manufacturer. Please notify the person in that facility who would handle such reporting.

-Fold Here-

If your report involves a serious adverse event with a vaccine, call 1-800-822-7967 to report.

Confidentiality: The patient's identity is held in strict confidence by FDA and protected to the fullest extent of the law. The reporter's identity, including the identity of a self-reporter, may be shared with the manufacturer unless requested otherwise.

The information in this box applies only to requirements of the Paperwork Reduction Act of 1995

The burden time for this collection of information has been estimated to average 40 minutes per response, including the time to review instructions, search existing data sources, gather and maintain the data needed, and complete and review the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to:

Department of Health and Human Services Food and Drug Administration Office of Chief Information Officer Paperwork Reduction Act (PRA) Staff PRAStaff@fda.hhs.gov Please DO NOT RETURN this form to the PRA Staff e-mail to the left. OMB statement:
"An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number."

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration

FORM FDA 3500 (10/15) (Back)

Please Use Address Provided Below -- Fold in Thirds, Tape and Mail

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service Food and Drug Administration Rockville, MD 20857

Official Business
Penalty for Private Use \$300

BUSINESS REPLY MAIL FIRST CLASS MAIL PERMIT NO. 946 ROCKVILLE MD

POSTAGE WILL BE PAID BY FOOD AND DRUG ADMINISTRATION

MEDWATCH

The FDA Safety Information and Adverse Event Reporting Program Food and Drug Administration 5600 Fishers Lane Rockville, MD 20852-9787

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES OR APO/FPO



MEDWATCH The FDA Safety Information and Adverse Event Reporting Program

(CONTINUATION PAGE) For VOLUNTARY reporting of adverse events and product problems

	FORM FDA 3500 (10/15) (continued) Page 3 of 3	
	B.5. Describe Event or Problem (continued)	
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	B.6. Relevant Tests/Laboratory Data, Including Dates (continued)	
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	_	
	B.7. Other Relevant History, Including Preexisting Medical Conditions (e.g., ellergies, pregne	ncy, smoking and alcohol use, hepatic/renal dysfunction, etc.) (continued)
-	1	
	F. Concomitant Medical Products and Therapy Dates (Exclude treatment of event) (continued)	
	1	
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	J	

Good Vigilance Practice (GVP)

 WHO stated for any company to be qualified for drug manufacturing and exporting, this require 6 steps (licence for factory, registeration for drugs, clinical trials if needed, inspection, laboratory analysis, <u>pharmacovigilance reports</u>).

- Later on, WHO mandate that vigilance should be not only in companies but also in independent center.
- Role of pharmacovigilance centers is to ensure good vigilance practice (GVP) and to adhere standard performance in vigilance practice.

ICSR Form

ICSR: Individual Case Study Report (ICSR) is an adverse event report for an individual patient by pharmaceutical company as source of data in pharmacovigilance.

Ministry of Health & Population Central Administration for Pharmaceutical Affairs Egyptian Pharmaceutical Vigilance Center (EPVC)



وزارة الصحة والمكان الإدارة المركزية للشئون الصيدلية مركز اليقظة الصيدلية المصرى

ICSR

Serial No.

Report Information

Report Title:

Classification of report	O Standard case Parent-child case					
Type of report	spontaneous					
Date first received at sender (Reporting Date)	dd mm yyyy					
Date first received (at EPVC)	dd mm yyyy					
Report version	initial					
Serious	O Serious O Non-serious					
Reason for seriousness	patient died					
Does this case fulfill local criteria for an	O Valid O I pyalid					

Pharmacovigilance

- Pharmacovigilance is the science and activities relating to the detection, assessment, handling and prevention of adverse drug reactions
- Egyptian Pharmaceutical Vigilance Center (EPVC) is established within the Ministry of Health (MOH) which has a direct contact with WHO.

 This EPVC collect and evaluate Information about the harms associated with the use of medicines in Egypt.

yellow card

- a unified form used to facilitate the reporting ADRs.
- The EPVC adapted this from the international Yellow Card (UK). This yellow card is to be used by the healthcare professionals and the patients.
- it is designed in English and Arabic forms, you can submit it to the center by one of the following means: fax, post, over the phone, email, or online submission.

How to obtain the reporting form

- A web based dynamic reporting module is available at EPVC website to be completed and submitted online.
 (www.epvc.gov.eg).
- Signal detection: if new side effect reported in the yellow card or in the ICSR "Individual Case Study Report (ICSR)" exceed specific number, the MOH or the WHO make signal detection for this new SE and make the required action
- The action may be withdrawal, add to warning drug leaflet, or more studies)



Adverse Drug Reactions Reporting Form

- * If you suspect that an adverse reaction may be related to a certain drug, or a combination of drugs, you should complete this form and send it to the address shown at the end of the card.
- * Please report all serious and minor adverse reactions.

A – Patient Details				
Name/ initials: Sex: (Optional)	e □ Female	Weight:	-kg A	ge/age group:
B – Suspected Drug(s)	_			_
Drug Name Concentration Used for Dose (Generic & trade)	Route	Date started	Date stopped	Batch number
C - Suspected Reaction(s)				
• Please describe the reaction(s): -				
• Date reaction(s) started:	Date reaction	ons(s) stopped:		
• Did the Reaction Stop after stopping the drug?	□ Yes □ N	lo □Don't k	Cnow	
• Did the Reaction Reappear after retaking the drug?	□Yes □ N	No □ Don't k	Know □]	Did not retake the drug
• Was the reaction serious (based on the reasons below)?	□ Yes □ N	No □ Don't k	Know	
If yes (serious), specify one or more:	□Life threat	ening	□ Hospitaliza	ation
□ Prolonged Hospitalization	☐ Congenital Anomaly		□ Permanent Disability	
☐ Required intervention to prevent Damage	□ Other, spe	cify		

	ther drugs tal		any other d	rugs taken du	ring the last	month prior to	the reaction-	
Drug Name (Generic & trade)	Concentration		Dose	Route	Date started	Date stopped	Batch number	
Name: Professional ac	fill in this form: ldress(institution	n/ clinic):		Specialty (if	physician):		specify	
e-mail:Signature:								
The information in th	is report is confident	tial and totally protec ig Reactions (ADRs)	eted including b	oth the Patient as Egyptian Pharm	nd Reporter iden	ntity. nce Center as per	the contact details below	
ead quarter: Huma gyptian Pharmaceu rug Authority (EDA l Abd Elaziz Al Soua	n Pharmacovigiland tical Vigilance Cent	ce Department – ter (EPVC)- Egypti da – Cairo, PO Box	an st. To	lexandria Regio El-Awkaf build el-Fax: +2 03- 5	onal Center: San ling, San Stefand 845004	n Stefano for Fam o , Alexandria e-mail: <u>alex.</u>	ily Health Centre, 2 Elka epvc@eda.mohealth.gov l hospital 6th district Nasr	
xtension (Tel): 1303 Extension (Fax): 1300 ax: +2 02 23684194 ebsite: www.epvc.gov.eg mail: pv.center@eda.mohealth.gov.eg			→ <u>S</u>	Tel: +2 01014300013 e-mail: cairo.epvc@eda.mohealth.go Sohag Regional Center: The old building of the Health Affairs Directorate 2nd floor- next to the security directorate building- Nasser city- Sohag Tel: +2 01063081606/01126540893 e-mail: sohag.epvc@eda.mohealth.go				

Steps for Implementing a Program "ASHP Guidelines for P&TC"

- 1. Develop definitions for ADRs and its seriousness
- 2. Assign responsibility for the ADR program within the pharmacy.
- 3. Develop forms for data collection and reporting "yellow card"
- 4. Promote awareness of the program "workshop, seminars" how to deal with the yellow card.
- 5. Develop policies and procedures for handling ADRs reports being sent to the FDA or EPVC.
- 6. Report all findings to PTC or MIH

Report this ADRs to Yellow Card

- Hospital on May 24 with an exacerbation of autoimmune encephalitis and received a 5-day course of high-dose intravenous steroids. Her symptoms rapidly stabilized and improved and she was discharged on May 29. She returned to Community Hospital's outpatient infusion department later on May 30 and May 31, and on June 1 for a 3-day course of XYZ Pharmaceutical's IV immune globulin, 90 grams daily.
- On June 6, Jane returned to the hospital emergency room with symptoms suggesting anemia. Lab work showed reticulocytosis, and a positive Coombs test.

Practical Example "continued"

- Her hemoglobin was 6.3 g/dL (it had been 13.4 g/dL on a previous admission, May 24). She was admitted with a working diagnosis of acute hemolytic anemia. The physician suspects an association between her recent treatment with XYZ Pharmaceutical's IV immune globulin and the anemia.
- Jane received two units of packed red blood cells on June 7. Repeat hemoglobin was 9.0 on June 8 and 9.2 on June 9. Past medical history also included diagnoses of obesity and hypertension. She was also taking atenolol, norvasc, folic acid, pantoprazole and felodipine.