EGYPTIAN DRUG AUTHORITY

هيئة الدواء المصرية

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EPVC
The Egyptian Pharmaceutical Vigilance center
مركز اليقظة الصيدلية المصري

EPVC Mission

Pharmaceutical Vigilance administration is the way through which the processes for authorizing, regulating, monitoring and evaluating the safety of any pharmaceutical product or medical device take place, in addition to disseminating any safety information for public health programs, healthcare professionals, and the Egyptian citizen.

The Pharmaceutical vigilance administration is an integral part of the Central Administration of Pharmaceutical Care that works on the enhancement of the pharmaceutical services to guarantee safe and effective use of medications in Egypt, under the patronage of the Egyptian Drug Authority.

Newsletter

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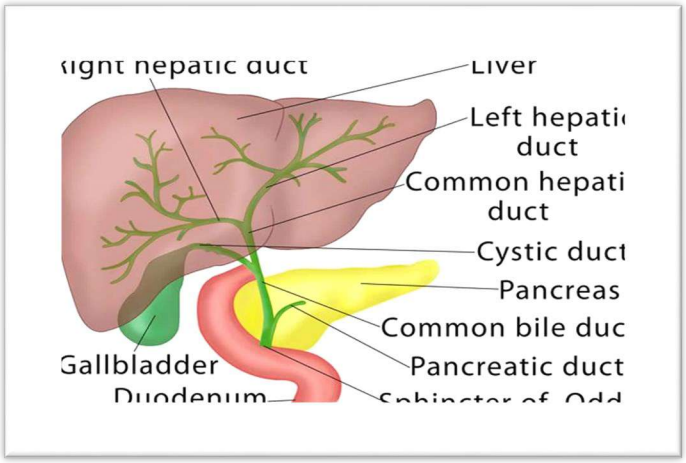
Safety Alert ! : Vanishing bile duct syndrome – a complication of drug induced liver injury

- Vanishing bile duct syndrome (VBDS) can occur as a complication of drug induced liver injury. It is characterized by progressive destruction and disappearance of the bile ducts in the liver.
- Patients with VBDS may present with symptoms of cholestasis, which can occur one to six months after starting the offending medicine.
- There is no standardized treatment. However, symptoms may resolve following the withdrawal of the offending medicine.
- Antibiotics are the medicine class most frequently associated with VBDS.



What is vanishing bile duct syndrome (VBDS)?

Bile ducts transport bile from the liver and gallbladder to the small intestine, where the bile helps to break down the fats from food.

VBDS is characterized by progressive destruction and disappearance of the bile ducts (ductopenia) in the liver, which slows or stops the flow of bile (cholestasis).1 VBDS can be diagnosed with a liver biopsy.2 VBDS may lead to a blockage of the bile duct system (biliary obstruction) and permanent liver damage.

The mechanism behind VBDS is unknown but it can be caused by immune-mediated disorders, cancers, infections and medicines. One suggested mechanism is T-cell mediated immune dysfunction leading to biliary apoptosis (programmed cell death)

VBDS is a complication of drug-induced liver injury

Vanishing bile duct syndrome is a rare but serious complication of drug-induced liver injury

Antibiotics are most frequently associated with VBDS, although several drug classes and medicines have been implicated. Table 1 lists the most frequently reported

medicine classes and medicines associated with VBDS.3

Signs and symptoms of VBDS have been reported one to six months after starting

the offending medicine.2 Some patients may be asymptomatic and VBDS is initially identified based on laboratory abnormalities. Other patients may have symptoms of cholestasis, such as persistent pruritus (itching), fatigue and jaundice (yellowing of the skin). Additionally, patients with chronic cholestasis may have skin xanthomas (fatty skin lesions), dyslipidemia (abnormal fat levels in the blood), and fat-soluble vitamin deficiencies (low levels of vitamins A, D, E and K)

Patients with VBDS have laboratory test results that are generally consistent with cholestasis (ie, abnormal liver function tests, including elevated serum alkaline phosphatase , total bilirubin and gamma glutamyl transpeptidase

Drugs and drug classes causing bile duct syndrome :

Medicine class	Medicines
Penicillins	Amoxicillin, amoxicillin + clavulanic acid
Fluoroquinolones	Ciprofloxacin, moxifloxacin
Sulphonamides	Co-trimoxazole (trimethoprim + sulfamethoxazole)
Macrolides	Azithromycin
Antivirals	Nevirapine
Anticonvulsants	Carbamazepine, lamotrigine
Rheumatologic agents	Allopurinol
Antineoplastic agents	Temozolomide
Non-steroidal anti-inflammatories	Ibuprofen

References:

Vanishing bile duct syndrome : *(Click Here)*

Case report from Cairo: " Iohexol: Non-ionic monomeric contrast media adverse events and preventive measurements"

The regional center in Cairo received several cases suffering from side effects after the administration of non-ionic monomeric contrast media represented in the form of:

"Fever, Shivers, Hypersensitivity reaction (Rash, Dyspnea, Tachycardia and Urticaria), Raised serum creatinine, Hypotension, Vomiting".

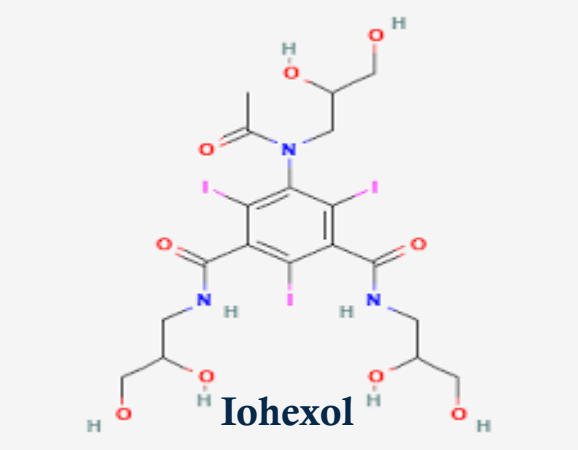
The patients' average age ranges from 39 to 87 years old. The presence of clusters drew significant attention to the expected adverse events caused by contrast media. Fortunately, most patients have recovered after receiving appropriate treatment. Contrast media generally have several precautions and preventive measures to minimize adverse events.

Background:

Iodinated contrast media can be classified as either ionic or nonionic and high-osmolar or low-osmolar. Nonionic monomers are preferred as contrast agents due to their nonionic nature, lower osmolalities, and potentially lower chemotoxicity compared to ionic monomers.

Iohexol is an iodinated nonionic, low-osmolar contrast medium used to visualize the anatomical structures of the body including blood vessels, tissues, organs, and body cavities. Iodine is the radiopaque component of Iohexol, allowing for opacification of vessels in the path of the blood flow of contrast media during angiography and urography. After Iohexol injection, internal structures of the human body can be visualized until significant hemodilution occurs.

Iohexol enhances computed tomographic (CT) imaging through augmentation of radiographic efficiency. The degree of enhancement is directly related to the iodine content in the administered dose; peak iodine blood levels usually occur immediately and dramatically decrease within 5—10 minutes. Iohexol may be Indicated in the following:



- Angiography
- arthrography
- A computed tomography (CT) imaging
- Endoscopic retrograde cholangiopancreatography (ERCP)
- Gastrointestinal radiography
- Herniography
- Hysterosalpingography
- Myelography
- Urography

Case report from Cairo: " Iohexol: Non-ionic monomeric contrast media adverse events and preventive measurements" (Continued)

Warning and Precaution

Overall, most people tolerate contrast media injections without adverse reactions. However, severe, life-threatening reactions do occur.		
Adverse event	**Description and People with high risk**	**Precautions and possible Preventive measurements**
Hypersensitivity	Iohexol may cause life-threatening or fatal hypersensitivity reactions, including anaphylaxis. Manifestations have included respiratory arrest, laryngospasm, bronchospasm, angioedema, and shock. Most severe reactions develop shortly after the start of the injection (within 3 minutes), although reactions may be delayed until hours later. The risk for hypersensitivity is increased in patients with a prior history of reaction to contrast agents, known allergies (eg, bronchial asthma, medication, food allergies), and/or other hypersensitivities.	Premedication with antihistamines or corticosteroids does not prevent serious life-threatening reactions, although it may reduce the incidence and severity of reactions. Obtain allergy and hypersensitivity history prior to administration. Emergency resuscitation equipment and trained personnel should be available prior to Iohexol administration. Monitor all patients for hypersensitivity reactions
Nephrotoxicity	Acute kidney injury, including renal failure, may occur after parenteral Iohexol administration. Risk factors for nephrotoxicity include preexisting renal impairment, dehydration, diabetes mellitus, congestive heart failure, advanced vascular disease, older age, concomitant use of nephrotoxic or diuretic medications, multiple myeloma (or paraproteinaceous diseases), and repeated and/or large iodinated contrast agent doses.	Use the lowest necessary dose in patients with renal impairment. Adequately hydrate patients prior to and following parenteral Iohexol administration. Avoid laxatives, diuretics, or preparatory dehydration prior to Iohexol administration

Case report from Cairo: " Iohexol: Non-ionic monomeric contrast media adverse events and preventive measurements" (Continued)

Cardiovascular events	Life-threatening or fatal cardiovascular reactions (eg, hypotension, shock, cardiac arrest) have occurred with parenteral Iohexol administration; fatal events, while rare, typically occurred during or 5 to 10 minutes after administration. Cardiac decompensation, serious arrhythmias, myocardial ischemia, or MI may occur during coronary arteriography and ventriculography.	Use the lowest necessary dose in patients with heart failure; emergency resuscitation equipment and trained personnel should be available during administration.
Dermatological effects	Severe cutaneous adverse reactions (including Stevens-Johnson syndrome [SJS], toxic epidermal necrolysis [TEN], acute generalized exanthematous pustulosis [AGEP], drug reaction with eosinophilia and systemic symptoms [DRESS]) have occurred 1 hour to several weeks after administration; reaction severity may increase and time to onset may decrease with repeat administration.	Avoid use in patients with a history of a severe cutaneous adverse reaction to Iohexol
Extravasation	May be a vesicant (higher osmolar contrast and/or higher volumes are associated with a higher risk) Extravasation may result in tissue necrosis and/or compartment syndrome, particularly in patients with severe arterial or venous disease	Ensure proper needle/catheter/line placement prior to and during administration. Monitor infusion site. Avoid infiltration.
CNS disturbances	Encephalopathy with symptoms of headache, visual disturbance, cortical blindness, confusion, seizures, loss of coordination, hemiparesis, aphasia, unconsciousness, coma and cerebral oedema.	Care should be taken in patients with the following risks: Patients with acute cerebral infarction, acute intracranial bleeding, previous stroke, and history of epilepsy.

Case report from Cairo: " Iohexol: Non-ionic monomeric contrast media adverse events and preventive measurements" (Continued)

Thrombo-embolic events	Serious, rarely fatal, thromboembolic events causing MI and stroke have been reported with both ionic and nonionic contrast media.	Use meticulous intravascular administration techniques during angiographic procedures. Minimize the length of the procedure to minimize the risk. Clotting has been reported when in vitro blood remains in contact with syringes containing nonionic contrast media; use of plastic syringes in place of glass syringes has been reported to decrease, but not eliminate, the likelihood of in vitro clotting. Due to the risk of thrombosis/embolism, avoid angiocardiography in patients

References:

Non-ionic contrast media background: *(Click Here)*

Clinical practice guidelines : *(Click Here)*

Clinical practice guidelines : *(Click Here)*

Iohexol SPC : *(Click Here)*

Egyptian Pharmaceutical Vigilance Center (EPVC) Vigiflow expansion project

The Egyptian Pharmaceutical Vigilance Center (EPVC) is delighted to confirm the ongoing progress of the Vigiflow Expansion program. As part of our ongoing commitment to pharmacovigilance, we recently organized a virtual training session entitled "Common Pitfalls in Vigiflow Data Entry." This initiative is designed to improve the quality of cases entered the database and enhance the overall reporting system.

Simultaneously, while conducting these training sessions, EPVC is actively receiving cases through the national database, revising them, and providing valuable feedback to coordinating organizations. This strategic approach is expected to result in a more robust and reliable method for tracking and addressing pharmaceutical safety concerns.

EPVC would like to express its appreciation to the Central Administration of Pharmaceutical Affairs, with special recognition for the outstanding cooperation of the Giza Health Directorate, Cairo Health Directorate, Menofia Health Directorate, Sharkia Health Directorate, and Dakahlia Health Directorate. We are grateful for their dedication and wish them continued success in their efforts.

Egyptian Pharmaceutical Vigilance Center participation in the 8th Medsafety week

The Egyptian Drug Authority (EDA) represented by the Egyptian Pharmaceutical Vigilance Center (EPVC) has participated in the eighth annual #MedSafetyWeek, that was running from 6th to 12th November 2023 with the theme “Who can report” and focusing on the key role of patients, doctors, and pharmacists who report a suspected side effect and how this contributes to the safe use of medicines. This global event has grouped 100 organizations, 88 countries, and 53 languages from all over the world.

This year, the Egyptian Pharmaceutical Vigilance Center is participating in this campaign by various activities, including social media ones, by displaying the press release, campaign posters and animations via the different EDA’s channels.

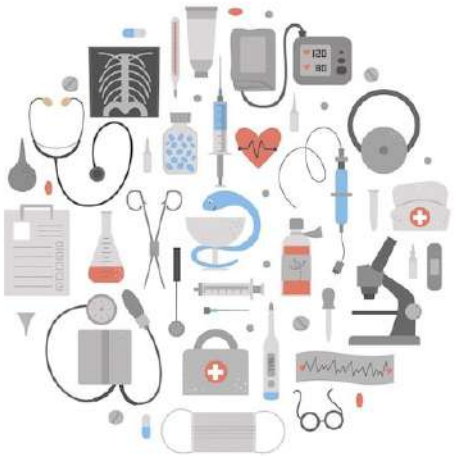
Also, several field visits and hosting sessions about pharmacovigilance were performed. This included the engagement of community pharmacies in 15 governorates, in addition to more than 200 healthcare professionals from several hospitals in different organizations as Health Directorates, Health Insurance Organization and University hospitals, for which the campaign flyers were disseminated.

EPVC Tips

On Pharmacovigilance

Medical Device Safety:

A medical device is any product used to diagnose, cure, or treat a condition, or to prevent disease. They range from small and simple, like a blood glucose meter, to large and complicated, like a ventilator. You might use one at home or at work, or you may need one in a hospital.



To use medical devices safely:

Know how your device works. Keep instructions close by.

Understand and properly respond to device alarms.

Have a back-up plan and supplies in the event of an emergency.

Keep emergency numbers available and update them as needed.

Visit EDA website to find all any medicine- related news, updates and alerts *Click here*

You will find all EPVC Newsletters and DHPCs here

You will also find all alerts regarding counterfeited and falsified products released by Central Administration of Operations *here*

The Egyptian Pharmaceutical Vigilance center
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One report counts

A call for reporting

Please remember that you can report safety information of medicines to EPVC using the following communication information:

What is Pharmacovigilance

Pharmacovigilance (PV) is defined as the science and activities relating to the detection, assessment, understanding and prevention of adverse effects or any other drug- related problem.

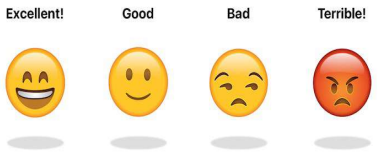
What is the Egyptian Pharmaceutical Vigilance Center?

With the increasing demand for patient's safety which is becoming more stringent, . The Egyptian Pharmaceutical Vigilance Center was established to be responsible for the safety monitoring of the pharmaceutical products throughout its lifecycle and it is the regulatory authority regarding Pharmacovigilance and its applications .

EPVC monitors the safety of all types of pharmaceutical products, including human medicines, biological products, supplements, cosmetics, veterinary medicines, medical devices, Biocides and pesticides

Participate with us

We invite you to take a quick survey on how much our communication with you is effective
We value your feedback! Help us enhance our communication by taking a quick survey. Your insights are crucial in ensuring we meet your expectations.
Survey Link: (Click Here)



Thank you for your valuable input

Communication information

The Egyptian Drug Authority (EDA)
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