

AWARENESS

The Safety of the Natural Sweetener Stevia

The national Drug and Poison Information Center (NDPIC) at the Saudi Food and Drug Authority (SFDA) has received questions from public about the safety and quality of stevia products is used as sweeteners, extracted from plant called *Stevia Rebaudiana Bertoni*. The NDPICs typical response is that these herbal product have not been tested for safety and may be produced in facilities that do not comply with Good Manufacturing Practice (GMP) guidelines.

The stevia sweetener is made by extracting the leaf's sweetening agents; glycosides, steviosides, and rebaudiosides A. Extracts are used to sweeten food and beverages in South America, Japan and China. The primary component responsible for the plant are glycosides of steviol, primary stevioside (ent-13- hydroxykaur-16-en-18-oic acid), which is 200 -300 times sweeter than sucrose and rebaudiosides A and C. stevioside.¹

The Following information was generated from Toxicology Bibliographic information (TOXLINE), US National Library of Medicine's TOXNET system database by using the terms "Stevia" and "sweetener". Excluded were analytical methods studies and articles without abstracts. The results is presented below.

Human Researches and Review articles:

A review article by Geuns suggested that Stevia and stevioside are safe when used as a sweetener. It is suited for both diabetics, and PKU patients, as well as for obese persons intending to lose weight by avoiding sugar supplements in the diet. No allergic reactions to it seem to exist.²

Shintosh et al. studied the effects of glycosyl stevia on medication compliance in pediatric patients and concluded that glycosyl stevia may improve medication compliance in pediatric patients.³

Ulbricht et al., did an evidence-based systematic review of stevia and he reported that two of long-term studies (1 and 2 years in length, respectively) indicates that stevia may be effective in lowering blood pressure in hypertensive patients. On other hand, data from shorter studies (13- months) did not go with these findings. A pair of small studies also report that stevia may have positive results with respect to glucose tolerance and response, although the relatively low methodological rigor of these experiments limits the strength of these findings.⁴

Carakostas MC. et al., published a review article conclude that high purity rebaudioside A (rebiana) produced to food-grade specifications and according to Good Manufacturing Practices is safe for human consumption under its intended conditions of use as a general purpose sweetener.⁵

Chatsudhipong V and Muanprasat C suggested that progress has been made concerning the biological and pharmacological effects of stevia, questions regarding chemical purity and safety still remain unsolved.⁶

Maki et al., reported a randomized, double-blind trial evaluated the hemodynamic effects of 4weeks consumption of 1000mg/day rebaudioside A vs. Placebo in 100 individuals with normal and low-normal systolic blood pressure (SBP) and diastolic blood pressure (DBP). They show that consumption of as much as 1000mg/day of rebaudioside A produced no clinically important changes in blood pressure in healthy adults with normal and low-normal blood pressure.⁷

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AWARENESS

ALERT

Ferri et al., in their clinical trial show that crude stevioside up to 15.0 mg/kg/day for 6 weeks did not show an antihypertensive effect. On the other hand, the results suggest that oral crude stevioside is safe and supports the well-established tolerability during long term use as a sweetener in Brazil.⁹

Brusick et al., reviewed the literatures on the on the genotoxicity of steviol and stevioside. He found that two of 16 studies and four of 15 studies showed genotoxic activity for steviol and stevioside respectively. He end with these substances do not pose a risk of genetic damage following human consumption.⁹

Results from multicenter, Randomized, double-blind and long-term clinical trials in Chinese with mild to moderate hypertension subjects demonstrated that continued consumption of stevioside (750 mg/day) for one year reduces both systolic and diastolic blood pressure, whereas no significant side effect or alteration on lipid or fasting glucose was observed.¹⁰

Animal (In vivo and In vitro) Researches:

Ghanta et al. reported a results indicate that Stevia rebaudiana may be useful as a potential source of natural antioxidants.¹¹

A result given by Nikiforov and Eapen clearly demonstrate that dietary administration of high concentrations of rebaudioside A for 90 consecutive days to Sprague-Dawley rats was not associated with any signs of toxicity.¹²

Yodyingyud and Bunyawong., conclude that stevioside at a dose as high as 2.5 g/kg body wt/day affects neither growth nor reproduction in hamsters.¹³

Saerphet et al., evaluate the safety of stevia rebaudiana on the reproduction of female rates concluded that aqueous extracts of *S. rebaudiana* at the concentrations used in this study do not alter the reproduction of female rats.¹⁴

Melis et al., reported that steviol is secreted by renal tubular epithelium, causing diuresis, natriuresis, kaliuresis and a fall in renal tubular reabsorption of glucose.¹⁵

Curry LL and Reberts A., found male rats in all treatment groups had significantly less mean body weight gain than control groups for the length of the study. Females showed similar results but only in the 25,000 ppm and 50,000 ppm treatment groups. They concluded that the reduced weight gain was not an adverse effect caused by rebaudioside A.¹⁶

Boonkaewwan C. et al., they suggested that stevioside attenuates synthesis of inflammatory mediators in LPS-stimulated THP-1 cells by interfering with the IKKbeta and NF-kappa B signaling pathway, and stevioside-induced TNF-alpha secretion is partially mediated through TLR4.¹⁷

Rebaudioside A was not found to cause mutations, chromosome damage, or DNA strand breakage in several in vitro and in vivo studies.¹⁸⁻²²

In vitro study done by Suttajit et al., they found stevioside and steviol are neither mutagenic nor clastogenic in vitro at the limited doses.²³

Klongpanichpak et al., demonstrate that Ames assays failed to approve that steviol has any mutagenic activity.²⁴

Matsui et al., show that no evidence of carcinogenicity of stevioside was obtained from one in vivo and six in vitro Mutagenicity studies.²⁵

NDPIC OBSERVATIONS:

Most of the accessible studies of stevia and its compounds have been performed in vitro studies or experimental animals. Only few studies have been accomplished in humans and these studies are still unsatisfactory and inadequate to take a firm decision and firm judgment to prove the safety of this plant. The NDPIC recommend to hold the stevia and its compounds to be approved until enough evidence be published.

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EXPANDED INDICATION FOR THE STATIN ROSUVASTATIN (CRESTOR®) FOR PEDIATRIC

The U.S. Food and Drug Administration (U.S.FDA) approved rosuvastatin (Crestor®) on October 15, 2010 for expanded use in selected patient population. ¹ The new indication is for pediatric patient 10- 17 years of age with heterozygous familial hypercholesterolemia (HeFH) to reduce elevated total-C, LDL- C, and Apo B after failing an adequate trial of diet therapy. ²

Rosuvastatin (Crestor®) is approved in Saudi Arabia to treat primary hypercholesterolaemia and mixed dyslipidemia, as an adjunct to diet and other non-pharmacological treatments, and for homozygous familial hypercholesterolemia. ²

Sources of information :

The approval of the new indication was based on results from the Justification for the use of Statins in prevention: an intervention Trial Evaluation Rosuvastatin (PLUTO study).³ The study was a 12-week, double-blind, randomized multicenter, placebo-controlled study with a 40-week, open-label follow-up. The PLUTO study was designed to evaluate the efficacy and safety of rosuvastatin in children ages 10- 17 with HeFH, a genetic disease characterized by high LDL cholesterol (the "bad" cholesterol) and early development of cardiovascular disease. ³

Safety:

The most common muscle related adverse events (AEs) observed with rosuvastatin therapy during the 12-week study was an elevated serum creatine phosphokinase (CK) greater than 10 times the upper limit of normal (> 10 x ULN). This was observed more frequently in the rosuvastatin treated group. ⁴

Any muscle-related adverse events for most of the CK elevations normalized while on study drug. All of the muscle and musculoskeletal events ranged from mild to moderate in intensity. None of these AEs were classified as serious or resulted in discontinuation from the trial. ⁴

ALT is more specific for hepatocellular injury than AST. During 12-weeks of double-blind treatment there were 2 subjects (4.8%) on rosuvastatin 5 mg, 2 subjects (4.5%) on 10 mg, 4 subjects (9.1%) on 20 mg, and 5 subjects (10.9%) on placebo that had ALT values above the reference range.³

There was no apparent difference in the incidence of abnormal ALTs among the treatment groups. No subject in any treatment group experienced ALT elevations >3 x ULN during the double-blind period. Only 1 subject (0.8%) had an ALT >3 x ULN during the open-label phase while on 5 mg rosuvastatin and it was classified "liver function test abnormal". ⁴

Conclusion:

The benefits of rosuvastatin outweigh its risks in this pediatric population with HeFH. Generally, the risks associated with rosuvastatin are comparable to other statins. Statins have been associated with myopathy and rhabdomyolysis. They also modestly increase hepatic aminotransferases, but may lead to severe hepatic injury, hepatitis or liver failure. These increases often resolve with continued statin therapy. The NDPIC recommends that the new indication for rosuvastatin in pediatric patients 10 to 17 years of age with HeFH be approved, in Saudi Arabia.

References:

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ALERT

PERIPHERAL NEUROPATHY AND TELBIVUDINE.

The Saudi Food and Drug Authority (SFDA) would like to inform healthcare professionals about the occurrence of peripheral neuropathy in patients exposed to telbivudine. Symptoms of peripheral neuropathy include pain, numbness, tingling, burning, and weakness most commonly affecting the hands and feet. Telbivudine is marketed in Saudi Arabia as Sebivo® and indicated for treatment of chronic hepatitis B with the evidence of viral replication and active liver inflammation

The following precautions should be taken to minimize the risk of peripheral neuropathy:

- Peripheral neuropathy has been uncommonly reported (0.3%) in telbivudine-treated patients when used as monotherapy.
- The risk of peripheral neuropathy is increased when telbivudine and pegylated interferon alfa-2a are combined (the frequency of occurrence is 16.6% in patient exposed to both drugs). The time to onset for this event was approximately 2 to 6 months.
- Such increased risk cannot be excluded for other interferons alfa (pegylated or standard).
- If peripheral neuropathy is suspected, treatment with telbivudine should be reconsidered.
- The benefit of using telbivudine in combination with interferon alfa (pegylated or standard) is not currently established.
- Telbivudine is indicated for the treatment of chronic hepatitis B in adult patients with compensated liver disease and evidence of viral replication, persistently elevated serum alanine aminotransferase (ALT) levels and histological evidence of active inflammation and/or fibrosis as monotherapy only.
- Healthcare professionals are encouraged to report any side effect related to sebivo® and other medications to the National Pharmacovigilance Centre.

ALERT

KETOCONAZOLE AND HEPATOTOXICITY

Saudi Food and Drug Authority warns about possible hepatotoxic effect associated with the use of oral ketoconazole (marketed as Nizoral®). Orally administered ketoconazole is used for several fungal infections when there is resistance or intolerance to other treatments.

Very rare cases of serious hepatic toxicity, including cases with a fatal outcome or requiring liver transplantation, have occurred with the use of oral ketoconazole. Some patients had no obvious risk factors for liver disease. Cases have been reported that occurred within the first month of treatment, including some within the first week. The reported incidence of hepatotoxicity has been about 1:10,000 exposed patients, but this probably represents some degree of under-reporting, as is the case for most reported adverse reactions to drugs.

Advice for healthcare professionals:

1. Because of the risk for serious hepatic toxicity, Nizoral® tablets should be used only when the potential benefits are considered to outweigh the potential risks, taking into consideration the availability of other effective antifungal therapy.
2. The risk of serious hepatic toxicity increases with longer duration of treatment; courses of greater than 10 days should only be given after full consideration of the extent of treatment response and the risk benefit of continuing treatment
3. Liver function must be monitored in all patients receiving treatment with Nizoral® tablets. Liver function must be monitored at weeks 2 and 4 of treatment, then continued monthly, with discontinuation of treatment if any liver parameters are elevated above 3 times the normal limit.
4. In patients with raised liver enzymes, or those who have experienced liver toxicity with other drugs, treatment should only be started in exceptional cases, where the expected benefit exceeds the risk of hepatic injury, and consideration should be given to monitoring liver function tests (LFTs) more frequently.
5. All patients should be counselled at the start of treatment with basic knowledge of the signs and symptoms suggestive of liver toxicity.

Advice for patients:

1. Tell your doctor if you have ever had liver problems. You must inform your doctor of any previous liver disease.
2. Liver problems can sometimes happen, even with a short course of Nizoral® tablets.
3. Stop taking Nizoral® tablets and tell your doctor if you have these symptoms:
 - a) Have long-lasting severe headache or blurred vision
 - b) Have a severe lack of appetite
 - c) Lose a large amount of weight (anorexia)
 - d) Feel sick (nausea) or are sick (vomiting)
 - e) Feel unusually tired or feverish
 - f) Get stomach pain
 - g) Have muscle weakness
 - h) Get yellowing of the skin or whites of the eyes
 - i) Pass unusually dark urine or pale stools

USING ZOLEDRONIC ACID AND POSSIBILITY OF DEVELOPING RENAL DYSFUNCTION

The Saudi Food and Drug Authority notifies healthcare professionals about possibility of developing renal dysfunction when using zoledronic acid. This decision was based on of 265 spontaneous reports of renal impairment after using of zoledronic acid. Zoledronic acid is marketed in Saudi Arabia as Aclasta® and is used for treatment and prevention of osteoporosis.

Renal failure due to using Aclasta® can be exaggerated by presence some risks factors that include advanced age, concomitant nephrotoxic medicinal products, concomitant diuretic therapy or dehydration occurring after Aclasta® administration.

The following precautions should be taken by healthcare professionals to minimize the risk of renal failure :

- Aclasta® should not be used in patients with severe renal impairment (creatinine clearance <30 mL/min).
- Aclasta® should be used with caution when concomitantly used with other drugs that could impact renal function.
- Creatinine clearance should be calculated before each treatment with Aclasta® followed by periodic monitoring of serum creatinine in patients with risk factors. Transient increase in serum creatinine may be greater in patients with underlying impaired renal function.
- Patients should be Adequately hydrated prior to and following administration of Aclasta®, especially elderly patients and those receiving diuretic therapy.
- A single dose of Aclasta® should not exceed 5 mg and the duration of infusion should be no less than 15 minutes.

WHAT IS AN ADR ?

The whole collection of marketed medicinal products have side effects whether good or bad. Bad side effects are called Adverse drug reactions (ADRs). ADRs is one of the most serious problems associated with drug administration. Therefore, ADRs can be defined as the 'response to a medicine which is noxious and unintended, and which occurs at doses normally used in man' ¹. ADRs are mainly classified into two types: type A and type B. Type A is predictable, dose-dependent and can be expected. Type B is unpredictable, non dose-dependent and cannot be expected ².

Magnitude of the problem:

ADRs are main reason behind increased number of deaths in the world. In The United States, ADRs are considered the sixth highest cause of death ³. ADRs may range from minor to serious side effects. An example of the latter is thalidomide disaster, which was used to treat morning sickness and nausea in pregnant women in 1960s. It was introduced to the markets in 1957 and was withdrawn in 1965 because of severe cases of birth defects in babies ³. Furthermore, ADRs amplify patient admissions to hospitals that leads to an increase in the hospital budgets to manage such problems. 16% and 13% of patients were admitted to hospitals in the United Kingdom and France respectively because of ADRs ².

The Reasons behind increased number of ADRs:

There are three main reasons of increasing number in ADRs: drug tests are not sufficient enough to detect them; healthcare providers are not very well trained to detect, prevent and report ADRs and there are no national spontaneous reporting systems responsible for monitoring ADRs of drugs after approval. Although there are certain procedures to test drugs before approval, these tests are inadequate to detect all ADRs because limited number of samples are used in clinical trials before the drug is getting approved. In clinical Trials, Treatment exposure is insufficient and special groups of patients such as children and elderly people are not included in those trials. Also, clinical trials in animals are inadequate to extrapolate drug safety in humans. In addition, some pharmaceutical companies do not perform most of drug tests which lead to an increased episodes of ADRs. ADRs may not be discovered during various clinical trials phases because study sample is limited. However, widespread use of drugs after approval may lead to an occurrence of ADRs which are not discovered during clinical trials phases⁴.

The second reason of increased number of ADRs is that healthcare providers are not trained to differentiate between various kinds of ADRs and to manage them. This leads to the situation that 'only about 1% of adverse events are reported'². However, healthcare providers could take up different techniques to prevent and detect ADRs which might lead to a significant decrease in ADRs occurrence. The third reason of increasing ADRs is that some countries have not established a pharmacovigilance centre (the organization which is responsible for the detection, evaluation, analysis and prevention of adverse events and drug related problems).

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HAEMOVIGILANCE IN DEVELOPING COUNTRIES

Blood transfusion safety has been a major concern during the last three decades in developed countries, leading to the establishment of a regulatory system called the Haemovigilance System (Hv.S.), which monitors transfusions' adverse events. Developing countries are just starting to apply this system.

Haemovigilance is a term derived from the Greek word 'haema' which means blood, and the Latin word 'vigilance,' which means to pay exacting attention to. Haemovigilance, as a monitoring system, can be defined as a set of prospective surveillance procedures for the whole blood transfusion chain (from donor selection to recipient follow-up), with the main purpose of detecting, collecting and analysing information on the unexpected or undesirable effects of labile blood products, with the goal of correcting their causes, preventing their recurrence and improving the safety of blood transfusions, either on a national, regional or individual level ⁽¹⁻⁴⁾.

Historically, after first observing the transmission of the HIV virus through transfusion in the 1980s/early 1990s, a complete monitoring system for transfusion risks was first established in France in 1991 as a response to the high number of infected transfusion recipients who had received untested contaminated blood products. This was believed necessary at the time to renew public confidence in the transfusion service, and similar systems were also started in Canada and Japan during the same time period for similar reasons. In 1996, the United Kingdom introduced a unique voluntary system called the Serious Hazard of Transfusion (SHOT), and the concept was then circulated in other European countries. In 1998, the European Haemovigilance Network (EHN) was formed and comprised of 11 European nations. Later, the International Haemovigilance Network (IHN) was established to include countries other than those from Europe. The Arab Haemovigilance Network (AHN) was established in 2008 as a confidential, voluntary, region-wide reporting system managed by an independent professional group whose aims are to improve the safety and quality of transfusion medicine practices in Arab countries ^(1, 5-10).

Many countries, such as the KSA and Egypt, are planning to adopt Hv.S., whereas such system is already in place in Tunisia, Malaysia and South Africa. Several difficulties that may delay establish or improve Hv.S. in many developing countries such as:

- i. Importing such a program from abroad which may not correspond to the country's requirements, priorities or facilities.
- ii. lack of responsiveness to transfusion-related adverse events among the medical and nursing staff.
- iii. level of economical and social maturity.
- iv. A lack of understanding at a high Authority level of the need to establish national Hv.S..

It is recommended to developing countries to establish their own monitoring system for Blood Transfusion chain:

- i. Build guidelines for risk assessment and management.
- ii. Detect the level of national health care maturity.
- iii. Construct a national quality, documentation and Hv.S. in blood transfusion services.
- iv. Focussed on donor recruitment.

Achieving to the maximum safety of the blood transfusion chain is required to implement a national, powerful supervision system with the ability to detect weak points and either suggest or apply new policies to solve problems for the purpose of improving blood transfusion safety and quality. However, blood transfusion can never be zero-risk. Despite this fact, blood transfusion is now safer than it has ever been due to pathogen reduction program, advances technology and the current monitoring system.

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LATEST DRUGS REGISTERED



GENERIC NAME	TRADE NAME	PRICE	MANUFACTURER	STRENGTH
CALCIUM FOLINATE (POLYENIC ACID)	CALCIUM FOLINATE (EREME)	183.65	EREME PHARMA GES.M.B.H.NFC.KG - AUSTRIA	10MG/ML VIAL
CALCIUM FOLINATE (POLYENIC ACID)	CALCIUM FOLINATE (EREME)	70.65	EREME PHARMA GES.M.B.H.NFC.KG - AUSTRIA	10MG/ML VIAL
LACTATED RINGER	COMPOUND SODIUM LACTATE INFUSION	12.25	PHARMACEUTICAL SOLUTION INDUSTRY LTD - KSA	
DESLORATADINE 5 MG	DESLOX FILM COATED TABLET	29.3	ZAMJOUN PHARMACEUTICALS COMPANY LTD - KSA	5 MG
DEXTROSE + RINGER SOLUTION	DEXTROSE IN RINGER SOLUTION	11.1	PHARMACEUTICAL SOLUTION INDUSTRY LTD - KSA	5%
RINGERS SOLUTION	RINGERS SOLUTION	11.1	PHARMACEUTICAL SOLUTION INDUSTRY LTD - KSA	5%
DEXTROSE 5% + LACTATE RINGER SOLUTION	DEXTROSE 5 RINGER LACTATE INFUSION SOLUTION	11.1	PHARMACEUTICAL SOLUTION INDUSTRY LTD - KSA	5%
DEGASELIX ACETATE	FIRMAGOR POWDER FOR SOLUTION FOR INJECTION	1580.55	FERRING OHPH - GERMANY	120 MG
SOD. ALGINATE + POTASSIUM + BICARBONATE	GAVIDON ADVANCE DENSEMINT FLAVOR ORAL SUSPENDED	25.35	RECKITT BENCKISER HEALTHCARE COMPANY - UK	
GRANISETRON HCL 1 MG/ML	GRANTRON SOLUTION FOR INJECTION	153.95	ZAJEDDAH PHARMACEUTICAL INDUSTRY - KSA	1MG/ML
GRANISETRON HCL 3 MG/3ML	GRANTRON SOLUTION FOR INJECTION	327.1	ZAJEDDAH PHARMACEUTICAL INDUSTRY - KSA	3MG/3ML
ETHAVERINE 100 MG	INTELANCE TABLETS	2231.85	JAMESON-CILAG S.P.A - ITALY	100 MG
LEVOFLOXACIN 500MG/100ML	LEVONIC SOLUTION FOR I.V. INFUSION	88	ZAJEDDAH PHARMACEUTICAL INDUSTRY - KSA	500MG/100ML
METRONIDAZOLE 500MG/10MG	METRONIDAZOLE INFUSION	8.15	PHARMACEUTICAL SOLUTION INDUSTRY LTD - KSA	500MG/100ML
PANTOPRAZOLE SODIUM 20 MG	RAZON S.C. TABLET	44.8	JFM - JORDAN	20 MG
RISPERIDONE 1 MG	RIDONE FILM COATED TABLET	82.95	TABOK PHARMACEUTICAL MANUFACTURING CO. - KSA	1 MG
RISPERIDONE 0.5 MG	RIDONE FILM COATED TABLET	41.45	TABOK PHARMACEUTICAL MANUFACTURING CO. - KSA	0.5 MG
RISPERIDONE 2 MG	RIDONE FILM COATED TABLET	123.95	TABOK PHARMACEUTICAL MANUFACTURING CO. - KSA	2 MG
RISPERIDONE 3 MG	RIDONE FILM COATED TABLET	159.4	TABOK PHARMACEUTICAL MANUFACTURING CO. - KSA	3 MG
RISPERIDONE 4 MG	RIDONE FILM COATED TABLET	203.3	TABOK PHARMACEUTICAL MANUFACTURING CO. - KSA	4 MG
RISPERIDONE 6 MG	RIDONE FILM COATED TABLET	261.4	TABOK PHARMACEUTICAL MANUFACTURING CO. - KSA	6 MG
BECLOMETASONE DIPROPIONATE	BECLOCELIL NASAL SPRAY	44.95	CRIEELI PHARMACEUTICAL S.P.A - ITALY	100MCG/DOSE
SUNITINIB MALEATE 12.5 MG	SUTENT CAPSULE	6029.8	PFIZER ENTERPRISES S.A.R.L. - ITALY	12.5 MG
SUNITINIB MALEATE 25 MG	SUTENT CAPSULE	12059.95	PFIZER ENTERPRISES S.A.R.L. - ITALY	25 MG
SUNITINIB MALEATE 50 MG	SUTENT CAPSULE	24119.15	SUNITINIB MALEATE 50 MG	24119.15
VALPROATE SODIUM	VALPROA SYRUP	11.25	VALPRICATE SODIUM	11.25
VALPROATE SODIUM	VALPROA SOLUTION	11.45	VALPRICATE SODIUM	11.45

توصية الممارسين الصحيين توخي الحيطة حين استخدام مستحضر كيتوكونازول و السوق بالاسم التجاري (نيزورال)

قامت الهيئة العامة للغذاء والدواء بتوجيه تحذير للمختصين الصحيين والمرضى بخصوص حدوث أعراض جانبية خطيرة على الكبد لدى المرضى الذين يستخدمون علاج كيتوكونازول (Ketoconazole) على هيئة أقراص والسوق بالملكة العربية السعودية بالاسم التجاري نيزورال (Nizoral) يستخدم مستحضر نيزورال عن طريق الفم لعلاج العديد من الالتهابات الفطرية في حال عدم قدرة المستحضرات الأخرى على علاجها أو عدم قدرة المرضى على تحمل تلك المستحضرات.

تم رصد عدد من حالات الوفيات وكذلك حالات تظليل زراعة كبد بالتزامن مع استخدام مستحضر نيزورال. الجدير بالذكر أنه في بعض الحالات المرصودة لم يكن لدى المرضى أي عوامل خطورة أخرى قد تساهم في حدوث هذه الأعراض. تحدث هذه الأعراض لدى المرضى بمعدل حالة واحد لكل عشرة آلاف مريض يستخدمون المستحضر (1/10000) وقد تكون هذه الإحصائية أقل من ما هو عليه الحال نظراً لحدودية عدد تقارير الأعراض الجانبية التي يتم الإبلاغ عنها من قبل المختصين الصحيين ويتراوح المدى الزمني لحدوث الأعراض الجانبية على الكبد ما بين أسبوع إلى شهر منذ بدء استخدام المستحضر.

نصائح للمختصين الصحيين:

- نظراً لفرصة حدوث أعراض جانبية خطيرة على الكبد يجب مقارنة المنافع المرجوة بالمخاطر المتعلقة باستخدام مستحضر نيزورال مع الأخذ بعين الاعتبار لوقر مستحضرات أخرى ذات فاعلية لعلاج الفطريات.
- فرصة حدوث أعراض جانبية خطيرة على الكبد تزداد عند استخدام أقراص نيزورال لمدة طويلة. لذلك يجب تقييم استجابة المرضى ومقارنة المنافع المرجوة بالمخاطر المتعلقة باستخدامه لمدة تزيد عن 10 أيام.
- يجب متابعة وظائف الكبد لجميع المرضى الذين يستخدمون أقراص نيزورال وذلك بعد أسبوعين وأربعة أسابيع من استخدام المستحضر وبشكل شهري بعد ذلك. على أن يتم إيقاف استخدام المستحضر في حالة وجد أي ارتفاع (3 أضعاف المعدل الطبيعي) في نتائج فحوصات وظائف الكبد.
- يمكن استخدام أقراص نيزورال في حالات الضرورة القصوى لدى المرضى الذين يعانون من ارتفاع في إنزيمات الكبد أو لديهم خلل في وظائف الكبد مسبقاً وذلك عند تكون المنافع المرجوة من استخدامه تفوق أعراضه الجانبية على الكبد. كما يجب الأخذ بعين الاعتبار لتقييم وظائف الكبد بشكل مكثف.
- يجب تلقيح المرضى بعلامات تضرر الكبد وحتمهم على إيقاف استخدام المستحضر ومراجعتهم للطبيب عند حدوثها.

مراجعة لسلامة استخدام محليات الأستييفيا (Stevia):

اعتبر محليات الأستييفيا (Stevia) أحد أنواع الأعشاب والتشجيرات التي لتدرج تحت فصيلة نبتة دوار الشمس (Asteraceae) والبالغ عددها 210 نوعاً. وتواجد هذه النباتات الاستوائية والشبه استوائية في مناطق أمريكا الجنوبية وأمريكا الوسطى وتعرف الأستييفيا (Stevia) على أنها نباتات سكرية يتم زراعتها بشكل كبير بغرض الاستفادة منها كمحليات. بناءً على نتائج التقارير العلمية المنشورة في المجالات العلمية المعتبرة حول تقييم مستوى سلامة تناول الأستييفيا (Stevia) حتى نشر هذا المقال لا توجد هناك أية دراسات سريرية يمكن أن تدعم إمكانية استخدام هذا المستحضر كبديل غذائي أو كأحد العناصر الموجودة في الغذاء لنا بؤس بعدم اعتماد هذه المادة حتى تتوفر دراسات تؤكد سلامتها.

تحذير الممارسين الصحيين من استخدام مستحضر Telbivudine:

قامت الهيئة العامة للغذاء والدواء بإعلام المختصين الصحيين عن احتمالية حصول حالات إصابة باعتلال الأعصاب الطرفية (Peripheral neuropathy) عند استخدام مستحضر Telbivudine السوق بالاسم التجاري Sebivo والذي يستخدم لعلاج التهاب الكبد الوبائي المزمن (نوع ب). كما أوصت الهيئة العامة للغذاء والدواء الممارسين الصحيين بضرورة الأخذ بالتعليمات التالية عند وصف مستحضر Telbivudine:

- تم رصد عدد قليل جداً (بمعدل 3-1) من حالات اعتلال الأعصاب الطرفية لدى المرضى الذين يستخدمون مستحضر Telbivudine بشكل متفرّد.
- لزيادة فرصة حدوث هذه الأعراض عند استخدام مستحضر Telbivudine بالتزامن مع مستحضر الإنترفيرون ألفا (Pegylated interferon alfa-2a) لتتوقع النسبة إلى 11.6 حيث حدثت حالات اعتلال الأعصاب الطرفية بعد استخدام كلا المستحضرين خلال مدة تتراوح ما بين 2-6 أشهر.
- يجب الأخذ بعين الاعتبار أن مستحضر Telbivudine يستخدم وبشكل متفرّد لعلاج التهاب الكبد الوبائي المزمن (نوع ب) في المرضى البالغين الذين يعانون من مرض الكبد التعويضي (compensated liver disease) مع وجود تكاثر الفيروس وارتفاع مستمر لمستوى إنزيم الكبد (Alanine Aminotranferase) ووجود التهاب نشط و / أو تلف في الكبد مثبت من خلال أخذ عينات من الكبد وفحصها مجهرياً.

اعتماد نتائج دراسة PLUTO لاستخدام دواء Crestor:

قامت الهيئة الأمريكية للغذاء والدواء باعتماد نتائج الدراسة المعروفة بـ (PLUTO) الموافقة على استخدام دواء "كريستور" (Crestor) لتوقاية من المرض الوراثي المعروف باسم فرط كوليسترول الدم العائلي المتغاير الأزدواج عند مجموعة جديدة من المرضى من الأطفال الذين تتراوح أعمارهم بين العاشرة والسابعة عشر من العمر ويعانون من ارتفاع بنسب البروتينات الدهنية المنخفضة الكثافة من النوع C وبعض البروتينات الأخرى.

هذا وقد الفت الإدارة الأمريكية للغذاء والدواء نظر الأطباء إلى أنه من الواجب عدم استخدام الدواء إلا بعد محاولة العلاج عن طريق الحمية الغذائية. لتجنب سوء استخدامه الذي قد يعرض بعض المرضى إلى خطر الإصابة بالأعراض الجانبية لهذا الدواء.

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