INTERNATIONAL JOURNAL OF ADVANCE RESEARCH, IDEAS AND INNOVATIONS IN TECHNOLOGY

ISSN: 2454-132X

Impact factor: 4.295

(Volume3, Issue1)

Available online at: www.ijariit.com

Synthetic Drugs/Hormones - Boon or Bane- Concept of Dooshivisha and Gara Visha

Dr Vishnu Sivan

B.M.J. Ayurvedic Medical College and PG Center Gajendragada Gadaga (Dst), Karanataka, India

Abstract-21st century is the world full of synthetics and everyone are living in the influence of synthetic substances. Altered life styles, food habits and irregular sleep pattern had resulted not only Non communicable disease but also resulting in reduced immunity and is risking the person more for infections. Pharma Industry has grown as big as hierarchy in recent centauries and introduces new chemical molecules quoting as capable for treating diabetes, hypertension etc. But bitter truth is prolonged usage these medications itself has adverse effect on liver and kidneys causes hepatotoxicity and nephrotoxicity or organs specific toxicity.

Keywords- Synthetic drugs/hormones, Communicable Disease, Hepatotoxicity, Nephrotoxicity.

INTRODUCTION

Development of Anti hypertensive medicine and anti diabetic drugs is considered to be a boon in the management of the respective diseases and safety evaluation of the same medicines are shown as lifesaving. But one has forgotten that these medicines are not given for a specific day but they are taken for longer duration and eve more than 20-30 years and threat serious complications to the body organs and was not highlighted in previous decade.

Mortality and morbidity

50% of acute livwr and kidney injury or damage oxxurs annually in USA is because of drug induced toxicity and yet internationally the data on incidence of adverse hepatic and renal drug reactions in general population remain unknown. at present also, The morbidity due complications associated with DM is still very high, Mortality and morbidity of the condition is still growing in spite of using more and more anti hypertensive and anti diabetic drugs which is still debatable for its efficacy.

Synthetic drugs/ hormones and their effects:
the Question being put forth was what happens when a person of known lifestyle disorder or a chronic disease is supposed to take the medication for a longer time and what may be the complication and side effects that may arise due to the medicine rather than the disease itself.

Risk factors for drug induce toxicity:

1.Race.

2.age:

3.sex

4.alcohol ingestion

5.liver disease/ renal disease

6.genetc factor

Classification of Antihypertensive Drugs

Diuretics: which lower blood pressure by depleting body sodium and reducing blood volume.

Sympathoplegic Agents: reduces peripheral vascular resistance; inhibiting cardiac functions; increasing venous pooling capacity.
Direct Vasodiators: reduces pressure by relaxing the vascular smooth muscle
Agents that Block production or Action of Angiotensin: reduces peripheral vascular potency

Quality of Life: Work, Performance, Satisfaction, General symptoms,
Sleep Scale, Overview

Background

Drugs are an important cause of liver injury. More than 900 drugs, toxins, and herbs have been reported to cause liver injury, and drugs account for 20-40% of all instances of fulminant hepatic failure. Approximately 75% of the idiosyncratic drug reactions result in liver transplantation or death. Drug-induced hepatic injury is the most common reason cited for withdrawal of an approved drug. Physicians must be vigilant in identifying drug-related liver injury because early detection can decrease the severity of hepatotoxicity if the drug is discontinued. The manifestations of drug-induced hepatotoxicity are highly variable, ranging from asymptomatic elevation of liver enzymes to fulminant hepatic failure. Knowledge of the commonly implicated agents and a high index of suspicion are essential in diagnosis.

For patient education resources, visit the First Aid and Injuries Center. Also, see the patient education articles Acetaminophen (Tylenol) Poisoning, FDA Overview, Pain Medications, and Alcoholism.

Mortality/morbidity

In the United States, approximately 2000 cases of acute liver failure occur annually and drugs account for over 50% of them (39% are due to acetaminophen, 13% are idiosyncratic reactions due to other medications). Drugs account for 2-5% of cases of patients hospitalized with jaundice and approximately 10% of all cases of acute hepatitis.

Internationally, data on the incidence of adverse hepatic drug reactions in the general population remain unknown.

Drugs withdrawn from the market secondary to hepatotoxicity

In the last few years, the US Food and Drug Administration (FDA) have withdrawn 2 drugs from the market for causing severe liver injury: bromfenac and troglitazone. Bromfenac (Duract), a nonsteroidal anti-inflammatory drug (NSAID), was introduced in 1997 as a short-term analgesic for orthopedic patients. Although approved for a dosing period of less than 10 days, patients used it for longer periods. This resulted in more than 50 cases of severe hepatic injury, and the drug had to be withdrawn in 1998. Troglitazone (Rezulin) is a thiazolidinedione and was approved in 1997 as an antidiabetic agent. Over 3 years, more than 90 cases of hepatotoxicity were reported, which resulted in withdrawal of this drug.

Kava kava, an herb used for anxiety, was reported as being hepatotoxic and was withdrawn from the German market. [1] The FDA has also issued a warning in this country. This demonstrates the importance of postmarketing surveillance to identify reactions that are not reported or are underreported in drug trials.

Pemoline (Cylert), used for attention deficit disorder and narcolepsy is no longer available in the United States. The Food and Drug Administration (FDA) concluded that the overall risk of liver toxicity from pemoline outweighs the benefits. In May 2005, Abbott chose to stop sales and marketing of their brand of pemoline (Cylert) in the U.S. In October 2005, all companies that produced generic versions of pemoline also agreed to stop sales and marketing of pemoline.

Other drugs that have significant limitations of use because of their hepatotoxic effects are felbamate (Felbatol), an antiepileptic used for complex partial seizures; zileuton (Zyflo), indicated for asthma; tolcapone (Tasmar), used for Parkinson disease; trovafloxacin (Trovan), an antibiotic; benoxaprofen, an NSAID; and tienilic acid, a diuretic.

Warnings issued by the FDA

In April 2010, the FDA had added a boxed warning, the strongest warning issued by the FDA, to the prescribing information for propylthiouracil. The boxed warning emphasizes the risk for severe liver injury and acute liver failure, some of which have been fatal. The boxed warning also states that propylthiouracil should be reserved for use in those who cannot tolerate other treatments such as methimazole, radioactive iodine, or surgery.

The decision to include a boxed warning was based on the FDA's review of post marketing safety reports and meetings.

Definitions
Diabetes mellitus was considered present if a patient had been informed of this diagnosis and was on prescribed treatment (diet, tablets, or insulin). Patients without this diagnosis but with a blood glucose $11 mmol/L at admission were included as newly

detected diabetes mellitus. Patients were categorized as non–insulin dependent (NIDDM) or insulin-dependent diabetics by clinical history according to the National Diabetes Data Group. Accordingly, NIDDM patients were .40 years of age at diagnosis who did not need insulin for $2 years after the diagnosis and were not prone. to ketoacidosis.
The diagnosis of definite AMI required that $2 of the following criteria were fulfilled: (1) chest pain of $15 minutes' duration; (2) $ 2 values of serum creatine kinase (S-CK) and serum creatinekinase isoenzyme B (S-CKB) or serum lactic dehydrogenase (S-LD) above the normal range (normal12 SD), including an LD-isoenzyme pattern typical of myocardial damage; and (3) development of new Q waves in $2 standard ECG leads. The diagnosis of possible AMI was used if typical chest pain was accompanied by only 1 S-CK or S-LD value above the normal range and/or new Q waves in one ECG lead only. A reinfarction was defined as a new AMI (.72 hours after the index infarct).

Classification of Anti diabetic Drugs:
Sulfonylureas- Glimepride, Glipizide
Biguanides-Metformin
Thiazoliidinediones –pioglitazone
Alpha glucosidase inhibitrors- Acarbose
Meglitinedes
Combination of sufonylureas plus metformin.
Sulfonylureas: low blood sugar, upset stomach, skin rash or itching, weight gain.
Biguanides: Sickness with alcohol, kidney complications, upset stomach, tiredness or dizziness , metal taste
Alpha-glucosidase inhibitors: Gas, Bloating and Diarrhea
Thiazolidinediones: weight gain, risk of liver disease, anaemia risk, swelling of legs or ankles.
Meglitinides: weight gain, low blood sugar.

Concept of dooshi visha

"Providing the strength of Ayurveda basic principles and evidential integrated knowledge of modern science, developing the diagnostic skills, gardening the art of decision making and building a model driven therapeutic guidance/framework to the physicians for the prevention, social health care and the cure of devastating, complicated metabolic disorder Prameha"

Definition

At Present, Gara Visha can be understood as any Matter when consumed internally or followed externally will react with the body and will creates deleterious effects.
Sources of Gara Visha:-
Junk food, Pesticides, Chemicals, Food Additives, Shampoos, preservatives and Synthetic Make up etc.
Signs and Symptoms:
Krishata/Malnutrition; Dourbalya; Alpagni/Loss of Apetite; Chardi/vomiting; Pratiloma Vyau-Abdominal Distension; Alasaka/Indigestion; Atisara/Diarrhea; Paandu/Anemia Yakrut-pleehodar Hepato/Spleenomegaly; Shopha/Edema; Errythema; Yakrutodara Shopha/Edema; Mahodara/Ascites; Kaamala/Jaundice; Ardhita/Paralysis; Swapna chinta parayana/

Concept of garavisha

Garavisha as per classics can be considered as any part of the body tissue administered in the body having a capacity to cause deleterious effects over a period of accumulation and is considered to be fatal in time.

