KARNATAKA STATE PHARMACY COUNCIL DIC DRUG INFORMATION CENTRE Authentic Drug Information

DIC Newsletter

KARNATAKA STATE PHARMACY COUNCIL

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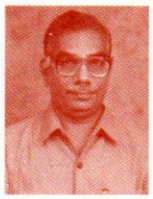
Newsletter of Drug Information Centre, KSPC

Official Desk



It is two & a half decades since Essential Drugs concept was formulated at the international level; more than two decades after "Health for all" declaration was made at Alma ata and one and a half decades since Nairobi conference on Rational Use of Drugs was held.

Although much has been achieved over the last two decades, huge gaps remain between the need for drugs & the supply of drugs, especially among poorer, less urbanized population. More important to this is the gap between the availability of drugs and their rational use.

It is evident that the use of pharmaceuticals is the complex interaction among the following factors- drug availability, experience of the prescribers, economic influences, cultural factors and community belief system.

Drugs form a part of the final link between patients and health services. The success or failure of this link depends on a number of issues. Essential drugs are critical to the success of health programs. The positive impact of drugs on health depends on the availability & appropriate use of essential drugs, which are defined as those drugs that meet the health needs of the majority of the population.

Once access to Essential drugs is assured, their proper use remains a challenge, which brings in the concept of Rational Drug Use.

It is extremely important to identify that piecemeal approaches leave important problems unsolved. So, the National Drug Policy acts as the guide for action. It is the document that contains the goals set by the government for the pharmaceutical sector & the main strategies for reaching those goals. It provides the framework to coordinate activities by the key players in the field.

Rational Drug Use involves informed, focused and active drug use practices by prescribers, dispensers and patients. Access to clinically relevant, up to date, user specific, independent, objective & unbiased drug information is essential for appropriate drug use.

Karnataka State Pharmacy Council has established the Drug Information Centre, which keeps up to date pharmacological & therapeutic information & disseminates relevant information when it is asked. Now, the objective of the DIC is to give clear and definitive information on Essential drugs and promote their Rational use.

There is also a collaboration with the Indian Medical association, Karnataka State Branch wherein drug information will be provided to the bulletin of the IMA Focus, which will be circulated to seven thousand doctors all over Karnataka, as a part of RDU programme.

Although access to unbiased drug information does not guarantee appropriate drug use, it is certainly a basic requirement for RDU decisions.

One of the greatest challenges in the field of RDU is to change the way in which patients and the healthcare professionals view the use of pharmaceuticals. A health policy of conscious intervention through key players is required in order to reach certain basic health objectives like measures to promote RDU and ensure the availability of medicines of adequate quality at a reasonable price.

To achieve this, an environment of cooperation rather than confrontation will create the conditions for effective and affordable investment in health. A participatory approach will build a dynamic system in which education & regulation both empower and protect consumers.

H. Jayaram
Additional Drugs Controller, Govt. of Karnataka
Executive Committee Member of KSPC

QUERY OF THE MONTH

This interesting query was asked by a gynec-oncologist from Kidwai Cancer Memorial Hospital, Bangalore.

Query: What is the dose of mannitol, when used along with cisplatin administration?

Deputy Director,
Drug Information Centre
Contact DIC for Drug Enquires. Phone : 3383142, 3404000

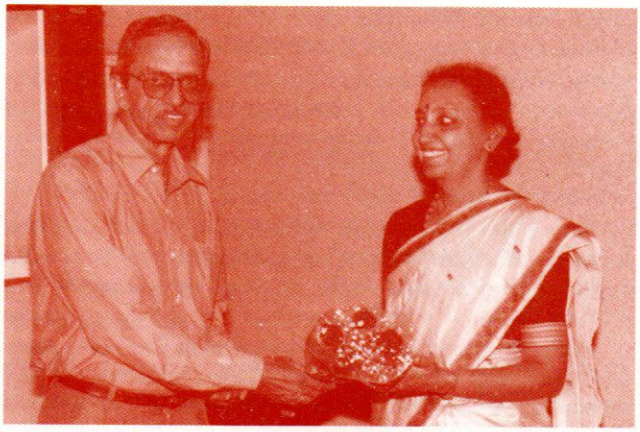
Answer:

1. The manufacturer recommends pretreatment hydration with 1 to 2 liters of fluid infused over 8 to 12 hours. They recommend that doses of cisplatin should be diluted in 2 liters of dextrose 5% in 1/2 or 1/3 normal saline containing mannitol 37.5 grams. This solution should be infused over 6 to 8 hours (Platino(R)-AQ, 1999).
2. The pharmacy department at MD Anderson Cancer Center recommends administering all doses of cisplatin in 1000 mL of NS (0.9% sodium chloride) over 2 hours. Maximum concentration should not exceed 1 mg/mL (Anon, 1993).
3. Several administration methods have been described to reduce the renal toxicity of cisplatin:
   a. Intravenous hydration with 1 to 2 liters of 0.9% sodium chloride for 8 to 12 hours, then a 15-minute intravenous infusion of cisplatin in 0.9% sodium chloride followed by 0.9% sodium chloride hydration for 24 hours (Prestayko et al, 1979)
   b. Intravenous hydration with 2 liters of 5% dextrose 0.33% sodium chloride with mannitol 12.5 grams immediately prior to a 10-to15- minute cisplatin infusion, and followed by continuous infusion of mannitol 10 grams over an hour with 0.45% sodium chloride over the next 6 hours (Prestayko et al, 1979).
   c. Cisplatin combined with mannitol 37.5 grams and furosemide 40 milligrams in 2 liters of dextrose 0.33% sodium chloride administered over 6 to 8 hours. Also, patients should receive additional hydration to replace fluids lost as a result of emesis and diuresis (Prestayko et al, 1979).

GUEST LECTURE

KSPC organized a lecture on "Rational Use of Drugs" by Dr. Uma Thekur , Professor in Pharmacology, Maulana Azad Medical College, New Delhi on 27 May 2000. This was targeted for the General Practitioners.

The efforts of KSPC in this field started in October last year when Prof. Ranjit Roy Chaudhury, coordinator WHO-India Essential Drugs program, visited this center to initiate this by addressing the doctors.



Mr. S.B. Gore, Registrar, KSPC receiving Dr. Uma Tekur

The area of Rational Drug Use (RDU) is a daunting challenge for all of us in the healthcare profession. The concept of RDU which encompasses right from National Drug Policy upto Clinical Pharmacy & Drug Information, was initiated by World Health Organization way back in 1985 when it convened a major conference in Nairobi on RDU. Since then , efforts have increased to improve drug use practices.

The situation being what it is in a developing country like ours, the financial pressures & demand for rationalization of resources may not permit the luxury of time to slowly develop the skills required.

With this in view, this process was initiated in 1992 in Delhi for the first time in India under the guidance of Prof. Ranjit Roy Chaudhury. The program in other states were developed & implemented in 1998.

This lecture was aimed at sensitizing prescribers regarding the concept of Rational Drug Use. Dr. Tekur spoke about the various steps for achieving RDU by starting with the National Drug policy upto the key points of what the doctors should look out in the advertisements & promotional literature.

The prescribers were introduced to the concepts such as Standard Treatment Guidelines and Essential drug list.

In the field of Rational Drug Use, a dialogue was initiated to discuss the factors that influence irrational use of drugs. The doctors were introduced to the actions that are to be taken to promote rational drug use.

The stress was laid on the importance of clear and definitive information on drugs in order to promote Rational drug use. The dissemination of pharmacological & therapeutic information by an unbiased source like the Drug Information center remains an important aspect.

Dr. Tekur also explained the importance of the patient education so as to improve the compliance of the patients. Belief that there is a "pill for every ill" needs to be addressed to by understanding the limits of medicine.

Critical attitude towards advertising was another important area that was dealt with.

Overall the lecture was aimed at understanding and practicing good prescribing.

KSPC NEWS

On the occasion of World Asthma Day on May 3rd 2000, a booklet titled "Breathing easier with Asthma" was released by Ms. Nafeez Fazal, Hon. Minister of State for Medical Education, Government of Karnataka. The booklet was compiled and edited by Karnataka State Pharmacy Council.

Dr. Susheela Sekhar; Mr. D.A. Gundu Rao, President, KSPC, Dr. B.S. Ramesh, President, IMAKSB; Ms. Nafeez Fazal, Minister of State for Medical Education; Dr. Seetha Lakshmi, Director of Medical Education

"Breathing easier with Asthma" has been reviewed by chest physicians, pharmacologists, pediatricians and yoga instructor, which is a easy reference of the do's and don'ts for patients with Asthma.

The booklet has been prepared in a patient friendly question and answer format dwelling on topics ranging from trigger factors of Asthma to the patient instructions of using devices like inhalers and rotahalers. The objective in bringing out this booklet is to promote public awareness about the symptoms, causes, triggers and management of Asthma. The solution building awareness has been aimed as the first step towards understanding this disease which will increase the likelihood of the patients to get the proper care and support they need.

The need for such an educational supplement was felt because previously treatment for asthma focused on treating the symptoms of asthma but now the treatment is aimed at preventing these symptoms from occurring at all.

This booklet will reach eight thousand doctors all over Karnataka through Indian Medical Association, Karnataka State Branch, which has sponsored the publication of the book.

Overseas Visitors

Mr. Frank May, Project Director of Drugs & Therapeutics Services at Repatriation General Hospital, Adelaide had visited KSPC along with Prof. Lloyd N Sansom, Prof of Pharmacy, Head, School of Pharmacy & Medical sciences, University of South Australia. The activities of KSPC in the field of Drug Information and steps taken in the area of Rational Use of Drugs were explained to them.

From L to R : Mr. S. B. Gore, Registrar, KSPC; Mr. Frank May; Dr. Nagavi; Mr. Shivananda, Vice President, KSPC; Dr. Samson

Cautionary and Advisory Label List

Drug	Clinical Application	Cautionary Instructions	Oral Dosing in relation to food	Additional Instructions
Amlodipine	Treats high blood pressure and chest pain (angina). Belongs to a group of drugs called calcium channel blockers.	1. Advise the patient not to stop taking this medicine abruptly unless otherwise advised by the doctor. 2. This medicine may affect mental alertness and/or co-ordination. Advise the patient if affected, not to drive a motor vehicle or operate machinery.	Advice the patient to take without regard to food	This medicine may cause dizziness especially when standing up quickly. Advice the patient.
Amoxycillin	Treats infections. Belongs to a class of drugs called penicillin antibiotics.	Advise the patient to take at regular intervals. Complete the prescribed course unless otherwise directed.	Advice the patient to take with or without food.	Advice if allergic reaction to any type of penicillin.
Amoxycillin Suspension	Treats infections. Belongs to a class of drugs called penicillin antibiotics.	Advise the patient to take at regular intervals. Complete the prescribed course unless otherwise directed.	Advice the patient to take with or without food.	Advice if allergic reaction to any type of penicillin. Throw away any unused medicine after 14 days.
Amoxycillin/ Clavulanic Acid	Treats infections. Belongs to a class of drugs called penicillin antibiotics.	Advise the patient to take at regular intervals. Complete the prescribed course unless otherwise directed.	Advice the patient to take with food or on an empty stomach.	Advice if allergic reaction to any type of penicillin.
Amoxycillin/ Clavulanic Acid Suspension	Treats infections. Belongs to a class of drugs called penicillin antibiotics.	Advise the patient to take at regular intervals. Complete the prescribed course unless otherwise directed.	Advice the patient to take with food or on an empty stomach.	Advice if allergic reaction to any type of penicillin. Store in the fridge.
Amphotericin – B Injection	Treats infections caused by a fungus. Belongs to a class of drugs called antifungals.	Advise the patient to take at regular intervals and complete the prescribed course unless otherwise directed.		
Ampicillin	Treats infections. Belongs to a group of drugs called penicillin antibiotics.	1.Advise the patient to take the medicine on an empty stomach, 1 hour before or 2 hours after meals with a full glass of water. 2. Advise the patient to take at regular intervals & complete the prescribed course unless otherwise directed.	Advice the patient to take 30 minutes before food.	Ampicillin may cause incorrect results with some urine sugar tests used by people with diabetes. Advice the patient.
Ascorbic acid	Helps patients who do not have enough Vitamin C in the body. It is sometimes used to add acidity to the urine.		Advice the patient to take with or without food.	
Asparaginase	Treats certain kinds of leukemia and other cancers.	Advise not to take aspirin or any product that has aspirin in it (such as some cold medicines) Talk to the doctor before dispensing any vaccines .	A nurse or other care giver trained to give cancer drugs will give the treatment.	Advice the patient to keep the medicine in the refrigerator but not to freeze it.
Astemizol	Treats hay fever symptoms and hives. Belongs to a class of drugs called antihistamines.	Advise the patient not to take erthromycin clarithromycin, itraconazole or ketoconazole while being treated with this medicine.	Advice the patient to take 30 minutes before food.	Taking too much of this medicine may cause life-threatening heart problems.
Atenolol	Treats high blood pressure, angina (chest pain), and reduces the risk of repeated heart attacks. Belongs to a class of drugs called beta-blockers.	1. Advise the patient not to stop taking this medicine abruptly unless otherwise advised by doctor. 2. This medicine may affect mental alertness and or co-ordination. Advise the patient that if affected, not to drive a motor vehicle or operate machinery	Advice the patient to take with or with out food.	Advise the patient not to take this medicine if patient has asthma & to consult the doctor.

Ciprofloxacin

Ciprofloxacin is a widely used antibiotic in this country. Whether such widespread use is warranted or not forms the basis of this article.

This antibiotic belongs to the class of Fluroquinolones and is very effective against Gram negative organisms like Pseudomonas aeruginosa, Salmonella, Shigella, Haemophilus influenzae, Neisseria gonorhoeae and Escherchia coli. It is also effective against Gram positive cocci that include methicilin susceptible Staphylococci and Streptococci. It is a recommended drug for upper urinary tract infection, prostatitis, sexually transmitted disease and gastrointestinal infection.

This fairly wide antibacterial spectrum has made this drug an Antibiotic of choice with lot of doctors and is used by them for diverse conditions, ranging from common sore throat to post operative wound sepsis. There is also wide spread self-medication of this drug and its easy availability is due to lax enforcement laws in our country.

Though it is possible to achieve cidal levels it is not an antibiotic of choice against Staphylococcal and Streptococcal infections, and for preventing wound infections there are better alternatives. Community acquired diarrheas generally need no antibiotics and if one has to use, there are alternatives available. The same applies to urinary tract infections.

This widespread use is gradually leading to a situation where this drug is becoming ineffective against Salmonella typhi that causes lot of morbidity in our country. Going by the experience of both community based and hospital-based doctors, increasing number of patients are either not responding or responding inadequately to this drug. Clinicians are often forced to use alternate drugs like Ceftriaxone, a far more expensive drug that has the additional disadvantage of parentral administration.

Let us examine some of the side effects that could occur.

Fluroquinolones as a class can cause nausea, vomiting, diarhoea, insomnia, dizziness, phototoxicity and damage to cartilage of growing bones [reason for not being used in children]. More important is the effect of potentiating the action of theophylline and anticoagulants. This occurs by interference with their intrahepatic metabolism. Theophyllin is a widely used xanthine in conditions wherein there is airway obstruction. It is a stimulant of the central nervous system with a narrow margin of safety. Peak serum concentrations of Ciprofloxacin are 40% higher in the elderly [due to reduced metabolism, smaller volume of distribution due to reduced extracellular fluid and fat and diminished renal excretion]. These contribute to the possibility of convulsions in the elderly if appropriate dosage adjustments are not made. The same applies to elderly patients who are on anticoagulation and the result is an increased susceptibility to bleed.

The drug combination of ciprofloxacin and tinadazole is widely used in our country as a broad-spectrum antidiarrheal. This needs to be discouraged. Most of the diarrheas are self-limiting and even in E-coli induced infections of gastrointestinal tract [though ciprofloxacin reduces the duration of diarrhea] it is better to use an alternate drug or manage the diarrhea with fluid and salt replacement alone.

Restriction on the use of this drug in conditions other than typhoid fever is required because it is a good oral drug against multi drug resistant Salmonella typhi. The fear is that, if this drug continues to be indiscriminately used, we may soon end up in the same situation that existed when this organism became rapidly resistant to chloramphenicol.

Dr.B.C.Rao.MBBS, MNAMS, FCGP.

Publication from KSPC

"Breathing Easier with Asthma" a booklet brought out by KSPC was sponsored by Indian Medical Association, Karnataka State Branch. It is in a patient friendly question & answer format that provides answers to questions about Asthma and its management. Kindly contact KSPC to procure this booklet.

BOOK-POST

Additional Information on any article is available on request
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