



health

DHAKA SATURDAY AUGUST 22, 2009

Adjusting drug dosage during Ramadan

STAR HEALTH DESK

With the changes in the mealtime, certain drugs' dose-schedule have to be altered during Ramadan. Changing the time, the number of doses, interval between dosages without consulting a doctor may be ineffective and sometimes harmful too.

However, many patients arbitrarily change the intake time and dosing of drugs. This behaviour could alter the efficacy and tolerance of drugs. In the face of this arbitrary use of drugs during Ramadan, drug intake needs to be adapted according to the prescription.

Certain drugs nullify Ramadan fasting and certain do not. The compatibility of fasting with various drug administration routes and their choice during Ramadan remains a matter for the doctor's own judgment. To standardise the choice of routes, distinguished Muslim jurists and religion experts, medical practitioners, pharmacologists agreed that the following administration routes do not nullify fasting:

- Eye and ear drops
- All substances absorbed into the body through the skin, such as creams, ointments, and medicated plasters
- Insertion into the vagina of pessaries, medical ovules, and vaginal washes

- Injections through the skin, muscle, joints, or veins, with the exception of intravenous feeding
- Oxygen and anaesthetic gases
- Nitroglycerin tablets placed under the tongue for the treatment of angina
- Mouthwash, gargle or oral spray, provided nothing is swallowed into the stomach
- Nose drops, nose sprays and inhalers
- Surgery involving general anaesthesia, if the patient decided to fast

Dose schedule

In fact, drug doses can be taken only between sunset and dawn, and the time span between them is shorter than outside Ramadan. Two different types of dosage schedule are commonly used during Ramadan—single daily dose and two or more daily dose.

Single daily dose: The easiest situation is that of patients who have a usual evening dose. Their therapeutic scheme remains unchanged during Ramadan, as it does not interfere with fasting. When the usual intake is in the morning or during the day, the concerned doctor must be careful when delaying the intake to the evening that this will not alter the efficacy of treatment or the tolerance of the drug.

Two or more daily doses: During Ramadan, accurate distribution of drugs pre-



scribed twice a day is difficult to achieve between the break from fasting and the beginning of fasting.

Refraining from fasting according to the Islamic rules could be a wiser prescription.

Nonetheless, patients with

two doses could take the first one at the break of fasting and the second one before the beginning of fasting, in which case the dosing time and the time span between the doses are both altered. These alteration could affect

the drug's plasma concentration profile and therefore, its efficacy and tolerance. This is even more relevant for drugs with a narrow therapeutic index (which indicates safety level of a drug) as the risk of toxicity is higher.

In the event of therapeutic problems during Ramadan, the number of doses should be reduced by using, when available, slow release formulations or chronotherapeutic formulations. Otherwise, a drug with a

longer elimination half-life should be used. Such drugs will have a longer duration of action and can therefore be taken at longer intervals, such as once a day.

For patients with chronic diseases, the new dosage regimen to be used during Ramadan needs to be established beforehand. Patients must also be informed about when they should take their drugs (before, during or after food intake), particularly when they are treated with a

drugs of which the absorption could be impaired by food intake.

However, the choice of drugs to be studied during Ramadan could be determined by survey evaluating the therapeutic problems encountered during this month of fasting. Focus should be on drugs for chronic diseases and especially on those with a narrow therapeutic index.

Extensive misuse of prescribed drugs during Ramadan may lead to therapeutic failures. The lack of survey data on this subject impairs effective evaluation of the problem. This lack of information is a problem for doctors, as they cannot give unbiased advice. Further studies should be carried out to provide more guidelines about the ways in which the administration of drugs should be modified.

In the meantime, doctors and scientists in the Muslim world should be encouraged to follow up their patients with chronic diseases during Ramadan, in order to establish optimal dosage regimens. Wide dissemination of research results, as well as achievement of consensus on relevant clinical and therapeutic issues, would allow health professionals to provide accurate and standard advice on the appropriate use of drugs during the holy month of Ramadan.

one-third for his breath. 3. Self-control: Religion teaches human to enjoy the pleasure of life, including food, in a moderate way, not becoming a slave to his desires. Prophet Muhammad (PBUH) elaborated on the duty of the Muslim to suppress greed, especially in eating.

4. Sharing: Prophet Muhammad (PBUH) demonstrated to his followers the pleasures of sharing as opposed to over-indulgence in the good things of life. The sharing of food with neighbours, relatives, friends, the needy and the destitute bring harmony and understanding among people. People are usually more relaxed when eating in company.

1. Never criticise any food: It is good not to criticise for any reason when offered to you. "The Prophet (PBUH) never criticised any food (he was invited to) but he used to eat it if he liked the food and leave it if he disliked it."

2. Eat less:

One of the main principles of good health is a balanced diet. Prophet Muhammad (PBUH) emphasised the habit of eating less as a method of preventing sickness and disease. Prophet Muhammad (PBUH) said, "Nothing is worse than a person who fills his stomach. It should be enough for the son of Adam to have a few bites to satisfy his hunger. If he wishes more, it should be: One-third for his food, one-third for his liquids and

one-third for his breath."

5. Eat slowly: Eating slowly is recommended for health. Slow eating helps in chewing the food well. This results in the exercise of the jaws and mixing of the saliva with food. Hence, efficient digestion takes place because the food particles are cut into smaller pieces, not requiring as much churning in the stomach or intestine. It was also reported that Prophet (PBUH) said, "I do not eat reclining."

A next generation prefilled insulin pen launched

Novo Nordisk, world's one of the leading healthcare companies in diabetes care has launched a next generation FlexPen®, a pre-filled insulin delivery device, which has a significantly lower injection force, says a press release.

The reduced injection force leads to lesser pain, more comfort and ease of use for the person with diabetes, encouraging compliance with the regimen. Mevlyn Oscar D'souza, Managing Director, ROI said that next generation FlexPen® has been available in some countries from late 2008 and now it is being launched in Bangladesh.

The Next Generation FlexPen® has been tested among patients to assess if the new features translated into actual patient preference. In total, 95% of patients who tried the next generation of FlexPen® said they would prefer to use it, over the current version of FlexPen®. Eighty-nine percent found it more convenient to use, 98% said it took less effort to inject and 83% felt it was safer to operate than the current version of FlexPen.

A. Rajan Kumar, Managing Director, Novo Nordisk, Bangladesh said that it is a result of more than 25 years of research and development of insulin delivery systems undertaken since Novo Nordisk invented the insulin pen.



Free treatment of clubfoot at CRP

STAR HEALTH REPORT

Centre for the Rehabilitation of Paralysed (CRP) has recently taken an initiative to treat these children who are born with clubfoot, says a press release. Clubfoot, a common birth defect where affected foot is turned to the side and children walk on their ankles or on the sides of their feet. CRP will provide free treatment in their centre located at Plot-A/5, Block-C, Section-14, Mirpur, Dhaka-1216 from coming October 25 to 28. Specialist physicians from home and abroad will be there for treatment and consultation. Interested parents are requested to enroll their babies' name in between August 20 to September 20 to the concerned officials. Contact persons are: (1) Dr Shamimul Kabir: +88012684243, (2) Mr. Rokhsana Parveen: +8801552359403.

H1N1 PANDEMIC VIRUS

Recommended use of antivirals

Yesterday the World Health Organisation (WHO) issued guidelines for the use of antivirals in the management of patients infected with the H1N1 pandemic virus.

The guidelines represent the consensus reached by an international panel of experts who reviewed all available studies on the safety and effectiveness of these drugs. Emphasis was placed on the use of oseltamivir and zanamivir to prevent severe illness and deaths, reduce the need for hospitalisation, and reduce the duration of hospital stays.

The pandemic virus is currently susceptible to both of these drugs (known as neuraminidase inhibitors), but resistant to a second class of antivirals (the M2 inhibitors).

should not wait for laboratory confirmation of H1N1 infection.

This recommendation is supported by reports, from all outbreak sites, that the H1N1 virus rapidly becomes the dominant strain.

Treat serious cases immediately

Evidence reviewed by the panel indicates that oseltamivir, when properly prescribed, can significantly reduce the risk of pneumonia (a leading cause of death for both pandemic and seasonal influenza) and the need for hospitalisation.

For patients who initially present with severe illness or whose condition begins to deteriorate, WHO recommends treatment with

oseltamivir or zanamivir. These patients should also receive treatment as soon as possible after symptom onset, without waiting for the results of laboratory tests.

As pregnant women are included among groups at increased risk, WHO recommends that pregnant women receive antiviral treatment as soon as possible after symptom onset.

At the same time, the presence of underlying medical conditions will not reliably predict all or even most cases of severe illness. Worldwide, around 40% of severe cases are now occurring in previously healthy children and adults, usually under the age of 50 years.

Some of these patients experience a sudden and

include treatment with oseltamivir.

In cases of severe or deteriorating illness, clinicians may consider using higher doses of oseltamivir, and for a longer duration, than is normally prescribed.

Antiviral use in children

Following the recent publication of two clinical reviews, some questions have been raised about the advisability of administering antivirals to children.

The two clinical reviews used data that were considered by WHO and its expert panel when developing the current guidelines and are fully reflected in the recommendations.

WHO recommends prompt antiviral treatment for children with severe or deteriorating illness, and those at risk of more severe or complicated illness. This recommendation includes all children under the age of five years, as this age group is at increased risk of more severe illness.

Otherwise healthy children, older than 5 years, need not be given antiviral treatment unless their illness persists or worsens.

Danger signs in all patients

Clinicians, patients, and those providing home-based care need to be alert to danger signs that can signal progression to more severe disease. As progression can be very rapid, medical attention should be sought when any of the following danger signs appear in a person with confirmed or suspected H1N1 infection:

- shortness of breath, either during physical activity or while resting
- difficulty in breathing
- turning blue
- bloody or coloured sputum
- chest pain
- altered mental status
- high fever that persists beyond 3 days
- low blood pressure

In children, danger signs include fast or difficult breathing, lack of alertness, difficulty in waking up, and lethargy or no desire to play.

Source: World Health Organisation, Pandemic (H1N1) 2009 brief note 8



Worldwide, most patients infected with the pandemic virus continue to experience typical influenza symptoms and fully recover within a week, even without any form of medical treatment. Healthy patients with uncomplicated illness need not be treated with antivirals.

On an individual patient basis, initial treatment decisions should be based on clinical assessment and knowledge about the presence of the virus in the community. This recommendation applies to all patient groups, including pregnant women, and all age groups, including young children and infants.

Disabilities or sleep problems may make people more likely to commit suicide, they added.

"Persons with these problems might be more likely to seek health care and perhaps more likely to receive prescriptions for psychotropic drugs," they wrote.

"Clinicians need to be

very rapid deterioration in their clinical condition, usually on day 5 or 6 following the onset of symptoms.

Clinical deterioration is characterised by primary viral pneumonia, which destroys the lung tissue and does not respond to antibiotics, and the failure of multiple organs, including the heart, kidneys, and liver. These patients require management in intensive care units using therapies in addition to antivirals.

Clinicians, patients, and those providing home-based care need to be alert to warning signals that indicate progression to a more severe form of illness, and take urgent action, which should