

Ramadhan fasting for Diabetics

Modes of insulin administration are going to significantly improve diabetes care in near future and it is going to greatly facilitate lives of diabetics desiring to observe Roza

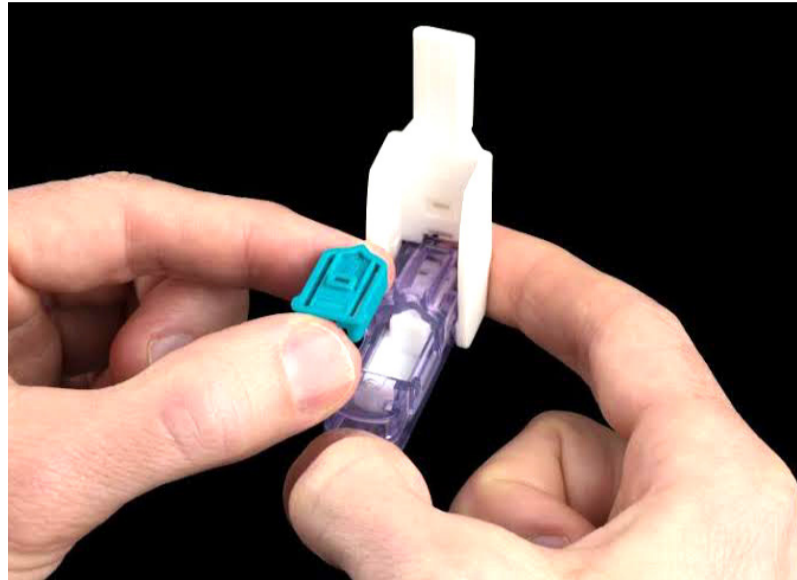


RESEARCH
DR ASHRAF

Advances in diabetes care are likely to improve life quality of diabetics in general and those desiring to observe Ramadhan fast. Major stride in this regard is the development of newer versions of insulin (designer insulin) or improvised methods of delivery. Commonly used are analogues of the insulin: ultra short acting analogues such as Lispro (Humalog), Aspart (Novorapid), etc. that have a very short duration of action and hence low chances of hypoglycemia (low sugar). These agents also don't require any waiting before the meal and therefore, are called "shot and eat" agents. Hence they are quiet appropriate for fasting diabetics.

Peakless insulin such as Glargine (Glaritus, Basalog, Lantus), Detmir (Levimer) or Degludec (Tresiba) are also suitable in combination with the above analogues or oral agents. These agents do not cause low glucose and also can be used in Ramadhan though judiciously.

Modes of insulin administration are going to significantly improve diabetes care in near future and it is going to greatly facilitate lives of diabetics desiring to observe Roza. On 29th June (the day of first Ramadhan) US Food and Drug Administration (FDA) approved rapid acting inhalational insulin (Afrezza) for its use in diabetes. It is good news for all diabetics. I visualize in near future it may be very useful in fasting diabetics. Afrezza, an insulin powder, comes in a single-use cartridge and is designed to be inhaled at the start of a meal or within 20 minutes.



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Alfred E Mann, philanthropist and chief Executive of MannKind, a California-based company that has no other products in the market, submitted the drug to FDA in March 2009 and it lost more than \$191 million last year.

MannKind has said that patients using the drug can achieve peak insulin levels within 12 to 15 minutes. That compares to a wait time of an hour and a half or more after patients inject insulin. The agency is also requiring several follow-up studies looking at the drug's long-term safety, including its impact on the heart and lungs.

It may be noted here that several other companies have failed to make inhaled insulin work commercially. In 2007, Pfizer Inc discontinued its

inhaled insulin Exubera after it failed to gain ground in the market. In 2008, Eli Lilly & Co ended its development program, citing regulatory uncertainty.

In another major development, we are going to start an international trial on another newer molecule called Semaglutide that will have to be injected only once a week and in this trial it will be compared with Glargine insulin. The agent has shown promise in Phase-II trials and during the recent investigator meeting in Copenhagen Denmark where investigators from 32 participating countries met, the potential of its use in fasting diabetics was discussed. I led the Indian team of investigators in this meeting. We are likely to get DCGI approval in the month of September 2014 and the study will start as Ethics permissions have already been granted.

Conventionally there are many choices for patients with diabetes opting to observe the fast. All these agents have simplified the diabetes care but need to be discussed fully with patients. Oral agents like Metformin, Pioglitazone, Gliptins (Sitagliptin, Saxagliptin, Linagliptin and Vildagliptin) and alpha glycosidase inhibitors (Voglibose or Acarbose) are the first line choices provided diabetes is uncomplicated and is not so severe (high level of glucose). These agents can be given at any time (Iftar or Sehri) and do not cause hypoglycemia (low glucose).

Glimepiride and Gliclazide MR are the second line agents but their requirement of doses should be less than half maximal. Important precaution is that these agents can be used at the time of Iftar (evening meal) and patients have to be warned about hypoglycemia. A blood glucose level of < 70 mg/dl at around 3-4 pm (>10 hours fast) should prompt to break the fast.

Among insulin users (mainly Type-1 diabetics), majority of subjects are advised to refrain from the fast especially if there is prevalent poor glucose control or history of frequent hypoglycemia, as has been exempted in the Holy Quran (Sura Bakra Verse 83:85). If the total insulin dose is approximately <30 units a day and patient is insisting on fasting, it is advisable to divide the insulin into two doses (premixed insulin generally) and administer two third before Iftar and 1/3rd before Sehri. It is needless to say fasting in diabetics is to be planned well before the arrival of Ramadhan and patient and physician should discuss the pros and cons after a fresh evaluation. Besides these caveats majority of subjects are able to fast without problems and in fact if properly guided derive multiple metabolic benefits by observing the fast.

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Problems of Aged People

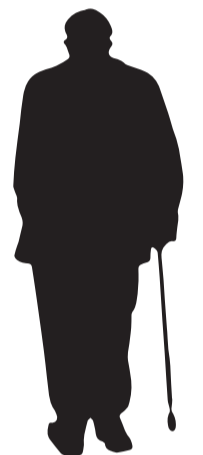
Undesirable though, the old age is bound to come in life

AGE
DR. JYOTI SHARMA

The old age is an integral part of human life. It is the evening of life. It is unavoidable and undesirable, phase of life. But it is really interesting to note that everybody wants to live a long life, but not to be old. It is ironical that however undesirable the old age, it is bound to come in life. A man is compelled to go through the pains and pleasures of this age like the other phases of life before making an exit from this mortal world.

As per the 2001 census data there were 77 million elders in India i.e. 7.5 % of the population. It was then projected that by 2051 it would reach 331 million i.e. 17.3 % of the population. Deteriorating health, malnutrition, lack of shelter, fear, depression, senility, isolation, boredom, non-productivity, and financial incapacity are the most common problems that senior citizens all over the world face today. The elders live in constant worry related to three matters, viz., diseases, poverty and loneliness. There is no escape from the first problem because, it is the result of natural process of aging. The second problem is either due to poverty or poor financial management during earning time that has resulted in the absence of saved funds and the third problem is either due to loss of spouse or NRI children or deliberate abandonment by the children.

The number of living alone seniors has increased in recent times due to various reasons. The childless and the spouseless seniors and the seniors with NRI children or non NRI but out of stationed children are forced to live alone. The seniors with decent investments and pension also prefer to live alone if they find it difficult to adjust with their immediate family and want to live with dignity and independence they are categorized as active seniors capable of self management of their affairs. These seniors initially are happy, enjoying their independence, solitude and leisurely life after decades of hard and pressurized life. Some of them pursue their hobbies or involve in community work or take up part-time jobs. But as they grow older, as solitude and leisure become excessive, as contact with children, relatives and friends become infrequent. When illnesses attach frequently, they are depressed worrying about their hospitalization, connected expenditure, immobility and death. They find self management of their life difficult. Management of outside affairs becomes a challenge and memory loss results in loss of valuables. They are exposed to dangers from strangers and service providers. In this materialistic world, where everybody is busy with their own activities, it amounts to too much expectation if such seniors expect their kith and kin to rush to attend to their requirements or even to pay them frequent visits. As the visits become infrequent, they have to satisfy themselves only with the company of television, books, phone, radio and the computer. They are non living things and cannot be substitutes for human company and with them sad and happy moments cannot be shared. Hence, the elders are psychologically affected and then self pity and depression sets in.



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Here I quote my own grandparent's example. My grandmother died at the age of 96 while my grandpa passed away at 91. With no known serious illness at the time of their death, we were all of the opinion that they died by reason of old age. How did they manage to both live a long life? With regard to their having a healthful life, both my grandparents were vegetarians. They religiously observed full eight-hour night sleep and two-hour afternoon nap every day. They were both active. My grandmother was all over the community interacting with people during her free time. My grandfather, who was a full-blooded Hindu Brahmin, was quite busy each day to share the thoughts of Gita with different kinds of people. As we had initially lived at my grandparents' home, I could clearly recall that there was no day that they did not have visitors, at least two to three batches of people with different stories and problems to tell and request advice for. In short, they were always interconnected with people. It was a home full of excitement, sharing, and guidance, an abode that I think was the spring of long life for my grandparents.

Majority of the elderly in both rural (50.78 per cent) and urban (57.35 per cent) areas are totally dependent on others for economic support. About 15.20 per cent of the elderly in rural areas and 13.71 per cent of the elderly in the urban areas are partially dependent on others. The poor seniors suffer due to inadequate and unsuitable and untimely food, lack of timely medical care, mental trauma due to constant verbal abuse. The pension provided by the state governments is inadequate (since it is only Rs200 or 400 per month in most of the states) to their requirement due to inflation and many of them are forced to take up jobs to help their families and to maintain their dignity. A large number of their family members are forced to migrate to cities and they usually leave behind their aged parents and forget their existence. As per a Help age India's study, ninety-two per cent of Delhi's elderly citizens are suffering in silence because they are ashamed or afraid to share their experiences. It is better for the very poor seniors to move to free senior citizen homes. It is true that they are not run satisfactorily. But recently the government has started regulating them.

Family life is very necessary for senior citizens and for parents to lead a life of security, care and dignity. So the act 'Maintenance and Welfare of Parents and Senior Citizens Act, 2007' will really help senior citizens, and they will be able to live a normal life. This will be a great relief to the parents and senior citizens. This act is also made applicable to senior citizens who are childless. The High Court of Delhi in one case appreciated the efforts of Parliament in enacting the Maintenance and Welfare of Parents and Senior Citizens Act, 2007. So if there is a senior citizen and who want to live with family go ahead. Also there is need of creating awareness among the people regarding this act and the rights which are given to senior citizens under this act. The abused seniors are either unaware of their rights or the provisions of the Act or chose not to seek protection under it as they do not want to cut off their relationship with their care givers. What the Indian government is doing for elders care can best be described as a situation of "vast undone and little done." Kerala has introduced some services for the elders such as the starting of day care centers for elderly. It is boon to the care takers. Therefore, starting of more number of day care centers in the urban areas and mobile clinics in the rural areas is an urgent need for our State also. Senior friendly public transport and toilets is another need. Sensitizing children regarding care of the elderly through schools is an urgent measure needed. Lack of hospitals for terminally ill and Alzheimer affected elders is another gap in India.

Let the government acknowledge the fact that the elders of today have contributed to the growth and culture of the country and let youngsters realize that their sacrifice and efforts have laid the foundation for their current position and hence it is the responsibility of the government and the family members to take care of the elder's needs instead of considering their prolonged life as a burden.

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Say NO to Sleeping Pills

It can be tempting for individuals to abuse these substances as a way to escape their problems



CAUTION
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Insomnia is a distressing condition that can take a lot of enjoyment out of life. People will turn to various medications as a way to deal with the problem. While most individuals will only use these pills as a means to cope with their sleeping difficulties there is the risk of addiction. Those who only use this night sedation short term and under doctor's instructions will have a low risk for addiction. It is more often those people who grow to rely on sleeping tablets over a long time period who are most at risk.

'Addiction' refers to a situation where an individual has become both physically and psychologically dependent upon this medication. If they were to stop using these sleeping pills they would not only have to battle a mental compulsion, but also go through physical withdrawal symptoms.

People do not normally start out with the intention of becoming addicted. Many start off taking sleeping pills that have been prescribed by their doctor for medicinal purposes. They later become dependent on this medication and might take it even when it is not required. There are also those who use this medication as a means to enhance the effect of alcohol or other drugs. People can grow to like the way that this type of drug sedates them and calms down the mind. Taking sleeping pills can create similar feelings to being drunk on alcohol. It can be tempting for individuals to abuse these substances as a way to escape their problems.

There is a wide range of different medications that are classified as sleeping pills. These drugs differ in

their ingredients and how they work to promote sleep.

* Barbiturates are a type of drug that causes sedation by depressing the central nervous system. In larger doses it can be used as a general anesthetic to put people to sleep. This drug is not commonly prescribed for sleeping problems anymore because the risks from overdose are higher than with other types of sleeping pill.

* Benzodiazepines are commonly prescribed for sleeping problems. This is a psychoactive depressant that works by enhancing the effect of a neurotransmitter called GABA. This chemical has a sedative and calming effect which can help people sleep.

* Nonbenzodiazepine drugs cause similar effects as the benzodiazepines but they are created with a different chemical structure.

Sleeping pill addiction can lead to deterioration in the quality of life and there are possible health consequences as well. The dangers associated with sleeping pill addiction will depend on the type of drug that is being abused but will usually include:

* Withdrawals symptoms will commence if the individual tries to quit the drug or significantly reduces the dosage.

* Increased tolerance
* The individual will feel compelled to take higher doses of the drug. This means that there is the risk of overdose.

* This type of drug abuse can lead to depression. There is an increased risk of suicide.

* People can be at much higher risk of accidents. Sleeping pills cause deterioration in the individual's sense of coordination.

* Abuse of these medications can damage body organs.

* Different physical symptoms are associated with different types of sleeping pill. For instance, benzodiazepine abuse can lead to blurred vision and respiratory problems.

* There will be an obsession with ensuring a regular supply of the drug. The individual may become willing to break the law or act unethically in

their attempts to obtain sleeping pills.

Those people who become addicted to sleeping pills will tend to develop certain symptoms. These signs of addiction may be noticeable to other people but the individual who is abusing the drug will often use denial to rationalize them away. The symptoms associated with sleeping pill addiction include:

* The individual finds it hard to cope without sleeping pills

* Withdrawal symptoms when the drug is stopped or dosage is reduced

* An obsession with obtaining these drugs. This is more noticeable when the individual has been denied sufficient access to them.

* Increased tolerance to the drug

* Loss of interest in hobbies

* Deterioration of personal hygiene and grooming

Treatment of Sleeping Pill Addiction

The danger of sleeping pill addiction means that the only safe treatment is to come off them completely. If the addiction is mild it may be possible to recover by tapering off the medication. This involves gradually reducing the dose over time so that there are no sudden withdrawal symptoms. There are specific regimens available for the safe tapering off from sleeping pills. However, in some instances the doctor might decide to allow the individual to reduce the dosage as they feel comfortable.

A heavy or long-term addiction to sleeping pills may require some type of rehab program. In recent years there has been an increase in the number of people seeking residential treatment for this type of addiction. This can be a good way to deal with the problem because the individual will receive a lot of support and gain skills for living life without the drug.

NOTE: Any person needing help for the above problem can come to our Community Psychiatry Centre (Drug De addiction Centre) at SMHS Hospital, Srinagar

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