

Review Article

Insulin therapy : lessons from shrimad bhagavad gita

Ameya Joshi¹, Bharti Kalra², Komal Dalal³, Suraj Purushottaman⁴,
Manoj Narkhede⁵, Sundeep Ruder⁶, Sanjay Kalra⁷

Diabetes mellitus is a common disease. One of the most important challenges faced by medical fraternity is a large proportion of diabetic patients remain uncontrolled due to under-use of insulin. This is because of lack of motivation amongst physicians (physician apathy) as well as patients for the use of insulin. This calls for better counselling resources at all levels to ensure timely and proper insulinisation of persons with diabetes. Present article compiles few verses from Shrimad Bhagavad Gita which can aid in breaking this physician as well as patient level insulin resistance.

[J Indian Med Assoc 2018; 116: 44-6]

Key words : Bhagavad Gita, clinical inertia, Insulin, Krishna.

Diabetes mellitus (DM) is a chronic disease due to metabolic derangements causing high blood glucose levels. Despite efforts on all fronts the global picture in DM care remains gloomy with most of the population being uncontrolled. One of the major reasons for this is delay in initiation or intensification of insulin therapy (IT) as well as default from IT. This can result in sudden worsening of hyperglycemia and a life-threatening complication like diabetic ketoacidosis (DKA) in type 1 DM (T1DM) and chronic hyperglycemia increasing complications in type 2 DM (T2DM). On average the time frame between diagnosis of T2DM and initiation of IT can be more than a decade when most patients need it early. Even in patients with poor control on 2 or more oral anti diabetics the delay for it can be more than 6 years¹⁻³.

Main reasons for delay in IT was fear for patient non-compliance, lack of time for communication, patient refusal, fear of injection and inconvenience of IT^{1,2}.

Other important barrier for IT is physician level resistance for insulin initiation. This stems from insecurity about losing the patient, fear of patient noncompliance, inadequate time and in-adequate experience with IT especially at general physician level⁴.

This problem needs to be better addressed by proper training as well as improvement in communication and motivation skills on part of the physician.

¹Department of Endocrinology, Bhaktivedanta Hospital And Research Institute, Mumbai 401107 and Corresponding author

²Department of Gynaecology, Bharti Hospital, Karnal, India

³Professor Spiritual Care and Advisor Clinical Research, Bhaktivedanta Hospital And Research Institute, Mumbai, India

⁴Department of Medicine, Bhaktivedanta Hospital And Research Institute, Mumbai, India

⁵Department of Medicine, Bhaktivedanta Hospital And Research Institute, Mumbai, India

⁶Department of Endocrinology, Life fourways Hospital, Johannesburg, South Africa

⁷Department of Endocrinology, Bharti Hospital, Karnal, India

- Many diabetic patients remain uncontrolled due to inappropriate management.
- Lack of initiation of insulin therapy (IT) in time is the important cause.
- Both physicians and patients are in dilemma to initiate IT.
- Knowledge from Shrimad Bhagavad Gita can help both physician and patient to overcome this dilemma.

The Bhagavad Gita :

The Bhagavad Gita, the divine song, records the advice given by Lord Krishna to Arjuna, on the battlefield of the Mahabharata War. The Gita is basically a conversation between Arjuna (the most important warrior from Pandavas), who succumbs to dejection when he realizes he must fight his kinsmen, and Lord Krishna, who helps him cope with this dilemma and stress. The time of insulin initiation is similar when the most important medication in management of diabetes is being used but there is reluctance on part of patient to use it. This is due to fear and anxiety brought out by the incomplete understanding of the task at hand, Similar to Arjuna's state in the Bhagavad Gita. The Bhagavad Gita is much more than a religious or philosophical text: its 700+ verses offer insight into every aspect of life and are universally relevant. One of the main themes being that of 'correct action'. The Bhagavad Gita teaches one how to act in life. Insulin initiation is associated with fear and shock for the patient as well as presents an important practical treatment dilemma for the practicing physician. Understanding of Shlokas from Shrimad Bhagavad Gita can help physician overcome these dilemmas as well as patients to overcome his fear and take the correct decision of initiation of insulin at right time.

Understanding the Pathophysiology :

Urdhwa mula madha shakham, Ashwaththam
Prahurawyayam,

Chandansi yasyi parnani, Yastam veda sawedawit (15:1)

They speak of the imperishable Asvattha giant fig tree with root above, branches below, whose leaves are hymns of Vedas; he knows that gains wisdom.

Lord Krishna describes an imperishable banyan tree with roots upward and leaves down whose branches are vedic hymns. One who knows this tree understands vedas.

Basically, it is a known fact that such a banyan tree with roots upwards doesn't exist. However, if you look at the reflection of banyan tree inside a river it is seen as a tree with roots upwards and leaves down. His lordship encourages the physician to see a patient in this manner. The roots reflecting the pathophysiology including the genotype of the patient. Which means that a type 1 diabetic with insulin deficiency can only be managed by insulin. Similarly, it is a known fact that beta cells deplete over time and a type 2 diabetic who does not achieve control with 3 oral anti-diabetics used properly, has absolute beta cell inadequacy. To control him and arrest the complications the optimal therapy is essentially going to be insulin. This represents the root of patient's condition. The emotional type, educational background as well as support system of the patient is represented by the bark of the tree. A physician should be able to anticipate the support patient has as well as his coping skills with the new treatment with different mode of administration (which can be more complex for less literate patient) and provide counselling accordingly. Finally, the leaves of the tree are what the physician sees in the patient. And till the time he tries to look at the previously mentioned factors he may not completely understand the patient.

Patients' Confusion and Coping :

Initiation of IT is not taken well by most patients. Many express confusions about same. A patient is a warrior who must fight diabetes and at the time of initiation of IT his/her state is clearly of a confused warrior (*Arjuna in Gita*) which is described as

Ishubhi pariyotsami, pujarha Madhusudhanaha (2:04)

Oh my lordship how shall I fight.

karpanya dosho pahata swabhavaha, pruchyati tvam
dharma sammudha santetaha,

yacheya sannischyati brumhi tanme,

shishyasteha sadhimam twam prapannam (2:07)

My nature is overpowered by the taint of pity. With my mind confused as to duty I ask thee: Tell me decisively which is good for me. I am the disciple. Instruct me who has taken refuge in thee.

This shloka describes Arjuna as a warrior asking Lordship that he is confused what to do and has lost his composure because of miserly weakness. He is begging to God to guide what is best for him. This is a similar situation when a patient is faced with the choice of insulin which is looked in a negative manner by him as well as the society.

Many times, the patient may end up saying I will not

take insulin similar to Arjuna saying I will not fight (*na yotsya iti govind muktaha*) 2:09.

Patients may start crying, be helpless with a feeling of grief and sorrow which is seen in San-jaya's initial description of Arjuna "overwhelmed with pity, eyes filled with tears and agitated, full of sorrow." (*ashrupurna kulekshanam, vishadantamidam vakyam*) 2:01

Extreme cases patient may express desire to suffer complications and misery rather than taking insulin, similar to Arjuna expressing his desire to die unresisting (*yadi mama apratikaram, ashastram shastrapanayaha*) 1:45.

It is the responsibility of the physician to give him the required confidence.

Response of the Physician :

A skilled physician is the correct mentor for the confused patient in distress. He understands not only the pathophysiology as well as the emotions of the patient, his financial as well as social supports. It is his responsibility to act in a manner so that the ignorant and confused patient gets courage to take his/her prescribed medication (*here insulin*) and not ignore it. A learned physician should never encourage the patient to stop insulin when it's actually needed (*na buddhi bhedam dhnyanayed, dhnyanam karma sanginam*) 3:26.

This particular lesson from Shrimad Bhagavad Gita is very important in removing the important barrier of "fear of losing patient" from the mind of Physician. It gives the physician confidence that he must tell the patient right path. Similarly, many patients take second or multiple opinions but when this principle of responsibility to show right path (*here IT*) is imbibed in physician community, it will go a long way in improving acceptance of IT. The Bhagavad Gita expands that the correct way to act is in an unselfish way or selfless manner. Any selfish action is always counterproductive and leads to sin. Whatever the action, one must act for a greater good, and not be attached to the fruit of that action.

His lordship has also warned against inaction. Many times, physicians are knowledgeable but still fail to follow what is preached. This is mainly driven by fear of losing patients and pressure from patient's relatives/friends. Lordship has clearly guided the physician saying "the Yoga of Action being easier of practice is superior to the Yoga of Knowledge"

(*sanyasah karmayogasha, nishreshya karavu bhau, tayostu karma sanyasat karmayoga vishishyate*) 5:02

These lines if imbibed in practice will never give physician the fear of losing patient and impart right kind of confidence in starting the right treatment (*here insulin*). The job of man is to move from a state of tamas (*inertia, indolence and inaction*) towards a state of sattva (*truth, peace, selfless action*). Timely insulin counselling and prescription, therefore, is a sattvic action, while clinical inertia is taamsik.

Patient Counselling Tips for the Physician:

Physician here is in the position of the right guide for the patient and many times finds it difficult to convince the patient in starting insulin. This reminds one that apart from being a science, medical practice is also an art. The physician must be a good motivator which can help convince the patient to take a treatment like insulin which is immensely helpful to him but often socially perceived in a negative mindset.

The physician should urge patient to be brave and face the situation by right action like Lordship tells Arjuna to fight using a direct approach

“Yield not to unmanliness, Arjuna; this does not befit you”
(*naitatwayu prapashyate, kshudro hridaya durbalyam, tyaktwo tishtha parantapaha*)” 2:03

As Lordship tells Arjuna full of grief and confusion to accept the situation, come over the grief and come at terms with reality so does the correct advice of physician along with counselling will make the patient come at terms with reality (*yogastha kurukarmani, sangamtyaktva dhananjaya*) (2:48). This acceptance allows the patient to handle the various conflicting positive and negative emotions sometimes even conflicting advice given by different doctors/friends and relatives, thoughts and information that may be available through various resources in this technology dominated world. And finally with right guidance by the physician about the right knowledge and resources patient can choose the right treatment (*here insulin*), in an unbiased manner, reaching the state of a yogi (*siddhya siddha samobhutva, samatvam yoga uchyate*) (2:48).

A genuine physician should help patient for insulinisation at right time, like Lord Krishna supports action. Physician should encourage patient to act rather than getting worried and de-pressed, as a means of coping with a stressful situation. This message is powerfully reflected in Bhagavad Gita.

“-----stand up, Arjuna, determined to fight”
(*tasmad uttishtha kaunteya, yuddhaya kritanischayaha*)” (2:37)

“-----nor let your attachment be to inaction”
(*ma karma phala he turbhur, mate sangastva karmanih*)” (2:47)

“-----he is no yogi who has merely given up all activity”
(*na sanyasi cha yogicha, na niragnir na chakriyaha*)”. (6:1)

Many times, initiation of insulin, or even thought of it leads to patient getting angry and frustrated. This can lead to loss of composure and actions which can ultimately be harmful to the patient himself. Lord Krishna has clearly told Arjuna about anger saying –

“From anger arises infatuation; from infatuation, confusion of memory; from confusion of memory, loss of reason; and from loss of reason one goes to complete ruin”

(*krodhat bhavati sammoha, sammohat smritivibhramaha, smriti bhranshat buddhinashi, budd-*

hinashat pranashyati) (*nachabhava yatah shantir, shantasya kutaha sukham*)” 2:63

In a similar manner, the physician can counsel the patient using these verses and explaining by apt examples how his anger and refusal of insulin can lead to self-destructive path.

Educated and Mutual Decision Making :

Once the physician fully explains the patient all correct rationale for IT he should leave it to the patient the final right to choose, giving the patient confidence that he has been provided the correct information from authentic resource and is enlightened to make right choice which he must make himself. This is shown by lord Krishna telling Arjuna “iti te jnyanam khyatam, guhyad guhya taram maya, vimrushyate dasheshena, yatheshasi tatha kuru” meaning his Lordship has conferred upon him all the knowledge, including the most confidential, but leaves it to Arjuna to choose. (18:63). This highlights the humility of an ideal physician, and his/her detachment from fruit of action. Never force a patient to take insulin: Anything forced is never forceful.

After listening to the advice of the physician the patient should have the feeling of clarity with all doubts cleared “this delusion of mine has entirely disappeared. (*mohoyam vigato mama*)” 11:1 and “----I have gained wisdom. I am free of all doubt---(*sthitosmi gata sandeha, karishye vachanam tavaha*)” 18:73

The Gita ends on a positive note, and Arjuna understands that salvation lies in appropriate action. Similarly, after the counselling the patient should have clarity that Physician is doing this initiation of insulin in his interest. Following this advice of timely insulin initiation will help him fight diabetes better. The Bhagavad Gita, thus, offers optimism to the person with diabetes, and to his caregivers.

REFERENCES

- 1 Kim SG, Kim NH, Ku BJ — Delay of insulin initiation in patients with type 2 diabetes mellitus inadequately controlled with oral hypoglycemic agents (analysis of patient- and physician-related factors): A prospective observational DIPP-FACTOR study in Korea. *Journal of Diabetes Investigation* 2017; **8**: 346-353. doi:10.1111/jdi.12581.
- 2 Zografou I, Strachan M, McKnight J — Delay in starting insulin after failure of other treatments in patients with type 2 diabetes mellitus. *Hippokratia* 2014; **18**: 306-9.
- 3 Moses CR, Seshiah V, Sahay BK, Kumar A, Asirvatham AJ, Balaji V, Kalra S, Akhtar S, Shetty R, Das AK — Baseline results indicate poor glycemic control and delay in initiation and optimization of insulin therapy: results from the improving management practices and clinical outcomes in type 2 diabetes study. *Indian J Endocrinol Metab* 2012; **16**: S432-3.
- 4 Brod M, Alolga SL, Meneghini L — Barriers to initiating insulin in type 2 diabetes patients: development of new patient education tool to address myths, misconceptions and clinical realities. *Patient* 2014; **7**: 437-50.
- 5 Ghosal S, Sinha B, Majumder A, Das A, Singh A, Ghoshdastidar B, et al — Consensus on "Basal insulin in the management of Type 2 Diabetes: Which, When and How?" *J Assoc Physicians India* 2017; **65**: 51-62.
- 6 Bhagvad Gita As It Is, by His Divine Grace Bhaktivedanta Swami Prabhupada. Los Angeles, USA; Bhaktivedanta Book trust international 1972.