

## Recommendations for management of Diabetes and its complications during Holy Hajj

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### Diabetes & Hajj

Holy hajj is one of the five pillars of Islam. It is obligatory for all adult healthy wealthy Muslims who can afford the journey. Many diabetic patients perform hajj. Hajj is a real challenge for diabetic patients & their attendants. Even if the COVID-19 pandemic seems to be under control, the potential threat of all the COVID-19 variants is still a major issue. However, by good planning & pre-travel education, and consultation with medical teams & caravan managers (Mwallim), Hajj can be performed safely without major health consequences.

### Health consequences during Hajj

Performing Holy Hajj is a good fortune. One can do it only if Allah desires. Once Hajj is accepted, he or she becomes spiritually innocent like newborn babies. Good physical and mental health are the most important prerequisites for Hajj. People having diabetes performing hajj may face difficulties as they travel through places where geography, weather, diet, habits & language are different. Specific risks during Hajj include intercurrent illnesses i.e. upper respiratory tract infections, urinary tract infections, dysentery & diarrhea, heat stroke, dehydration, generalized body ache & fluctuating blood glucose levels. So, consultation with a physician prior to travel for Holy Hajj and acquiring some knowledge of managing those common problems including hypoglycemia is the basis to overcome such unpleasant circumstances.

### What to do prior to travel

Better to start preparation for Hajj prior to Ramadan by consulting with a concerned physician as well as the caravan manager (Mwallim):

- Patients should undergo a complete clinical evaluation, including a thorough foot examination, and renal as well as cardiovascular profile in their pre-Hajj medical assessment which should take place at least 2–3 months prior to Hajj.<sup>1</sup>
- Practice walking for at least half an hour a day.
- Complete your recommended vaccinations including COVID-19.
- It is obligatory to learn practical management of diabetes including hypoglycemia, sick day management & blood pressure control in different adverse situations by consulting with physicians prior to travel.
- Pack your general & emergency medications, insulin, syringe, glucometer, cotton, dipstick, etc. in a separate plastic container or in your hand luggage.
- Carry on your physician's prescription always with you and keep a duplicate copy in your luggage.
- You can keep your insulin in water for better storage in hot weather where freezing facilities are not available or can take suggestions from the provider company.
- Monitor blood sugar regularly by glucometer.

### Diabetes care during Hajj

- Always carry some carbohydrates (i.e. Glucose, Sugar, biscuits, Dates, etc.)
- As hypoglycemia is a medical emergency, it is obligatory to explain its proper management to the caravan manager & teammates in the very beginning
  - Eating one to two dates, which are easily

available at pilgrim locations, or a high carbohydrate drink/meal is recommended in response to symptoms of hypoglycemia or in situations where a meal is skipped or delayed.<sup>2</sup>

- Drink plenty of normal Jamjam water daily.
- If you use insulin, check your blood glucose by glucometer and urine ketone by dipstick before Ihram. During Ihram check your urine glucose with a dipstick.
- Patients must be educated on how to monitor blood glucose during Hajj.<sup>3</sup>
- Insulin can be stored in special cool wallets. Kept away insulin & blood glucose test strips from direct sunlight.
- Before Tawaf (Circumambulation around Ka'abah) and sayee (walking between Safa and Marwah) it is advisable to consume complex carbohydrates and dates if required.<sup>4</sup>
- Patients with well-managed DM may be advised to slightly reduce their insulin dosage by 10–20% owing to prolonged hours of physical activity during the pilgrimage.<sup>5</sup> Same can also be applied to sulfonylurea drugs (i.e. Glybenclamide) before and during those days of long walking.
- Try to protect your feet from damage by ground tiles or other pilgrims during walking or from being stampeded on while circling the Ka'abah barefoot.
- Consult Hajj medical team promptly in case of fever, diarrhea, vomiting, or any acute medical conditions.

#### International SOS' top advice for Hajj during COVID-19:<sup>6</sup>

- It is important to follow good hygiene measures including regularly washing hands and immediately disposing of used masks and gloves safely.
- Ensure you comply fully with all government requirements.
- Save emergency contacts on your mobile phone and make sure it is charged (police, ambulance, embassy, and local contacts).
- Monitor the situation and remain abreast of the latest news and recommendations.

- Stay well hydrated to avoid heatstroke. Select safer food and beverages.
- Pay attention to people who may look sick; again, keep your distance, wash your hands frequently, and avoid touching your face.
- Avoid direct contact with animals, including camels. A potentially severe illness caused by another Coronavirus, the Middle East Respiratory Syndrome Coronavirus (MERS-CoV), can be present in camels and their products.

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#### Conflict Of Interest

The authors have no conflicts of interest to disclose

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