

TITLE

**Management of
Hyperglycemia in
Severely-Burned
Patients**

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Hyperglycemia and insulin resistance are common findings in severely-burned patients and are associated with increased hospital morbidity and mortality. Current evidence tends to discourage intensive insulin regimens in critical care settings although it seems to be beneficial in surgical patients. Nowadays, there is no consensus about the specific glucose range that should be targeted in burn patients, but 130mg/dl have been proposed as the desired value.

It has been shown that not only plasma glucose levels, but also glucose variability should be controlled to improve outcomes in critically ill patients. Insulin is the treatment of choice in these situations and its use is associated with improved post-burn morbidity. Besides its hypoglycemic effects, it is known that insulin has anti-inflammatory and anabolic effects that might be beneficial for burn patients.

However, novel pharmacological agents are now available and the management of hyperglycemia has improved significantly. These strategies include incretin analogues, metformin and PPAR- γ agonists. They have been successfully used to modulate glucose levels in burned patients and are under current investigation.

The duration of insulin resistance is unique for this population: it is present from the first day after burn and persists for at least three years after injury. The clinical implications of this situation are yet to be understood.

Biography

Gabriel Mecott is a plastic surgeon graduated from the Universidad Autonoma de Nuevo Leon (UANL) in Mexico. He was a burn research fellow in the Shriners Hospital for Children and the University of Texas Medical Branch at Galveston (UTMB). He obtained the master degree in medical sciences from the UTMB and is currently coordinator of the burn unit and associate professor of the plastic surgery division at the UANL. His area of expertise is about insulin resistance and glucose modulation in burn patients, with presentations in international conferences and publications about this subject.