Terapi Medik Gizi pada Pasien Obesitas yang Mengalami Sakit Kritis dengan Acute Kidney Injury = Medical Nutrition Therapy in Critically Ill Obesity Patient with Acute Kidney Injury: Case Series

Meilianawati, author

Abstrak

Latar belakang
Jumlah pasien obesitas yang dirawat di unit perawatan intensif semakin meningkat. Pasien obesitas dalam kondisi sakit kritis berisiko mengalami acute kidney injury (AKI). Belum ada panduan pemberian energi dan protein yang optimal bagi pasien obesitas sakit kritis dengan AKI. Asupan energi dan protein yang tidak adekuat akan memperberat risiko malnutrisi dan sarkopenia sehingga meningkatkan komplikasi, lama rawat, dan mortalitas. Terapi medik gizi yang komprehensif diperlukan untuk mencegah progresivitas penyakit dan penurunan status gizi yang memengaruhi luaran klinis pasien.
Kasus:
Pasien pada serial kasus ini adalah tiga orang laki-laki dan satu orang perempuan, berusia 58-64 tahun dengan status gizi obesitas, mengalami sakit kritis, dan menderita AKI saat perawatan. Seluruh pasien mendapatkan terapi medik gizi sejak sakit kritis fase akut. Preskripsi energi berdasarkan rule of thumb sedangkan protein berdasarkan nilai imbang nitrogen. Pemberian nutrisi disesuaikan dengan kondisi klinis, hemodinamik, dan toleransi asupan pasien.
Hasil:
Selama perawatan, asupan energi pasien dapat mencapai 30 kkal/kgBB dengan protein 1-1,3 g/kgBB. Dua pasien mengalami imbang nitrogen negatif hingga akhir perawatan karena asupan protein tidak adekuat dan kondisi hiperkatabolisme berat. Dua pasien dengan asupan protein yang cukup (1,1–1,2 g/kgBB) memiliki imbang nitrogen yang normal. Tiga pasien mengalami komplikasi sepsis dan satu pasien menderita ulkus dekubitus. Satu pasien mengalami malnutrisi dan sarkopenia saat perawatan sakit kritis. Dua pasien dengan imbang nitrogen seimbang dapat melewati fase kritis dan pindah ke ruang rawat biasa. Dua pasien dengan imbang nitrogen negatif meninggal dunia saat perawatan di ICU.
Kesimpulan:
Terapi medik gizi dan pemberian protein yang adekuat pada pasien obes sakit kritis dengan AKI dapat memperbaiki kondisi klinis, meningkatkan kesintasan, dan menurunkan mortalitas.
.....Background
The prevalence of obesity has increased and is reflected in the intensive care unit (ICU) population. Critically ill obese patients are at risk for acute kidney injury (AKI). There are no guidelines for optimal energy and protein delivery for critically ill obese patients with AKI. Inadequate energy and protein intake will exacerbate malnutrition and sarcopenia, thereby increasing complications, length of stay, and mortality. Comprehensive nutritional medical therapy is needed to prevent disease progression and derivation of nutritional status that affects the clinical outcome.
Case
The patients were three men and one woman, aged 58-64 years with obesity, critically ill, and AKI.
All patients received medical nutrition therapy since the acute phase of critical illness.

Energy prescription is based on the rule of thumb while protein is based on the nitrogen balance.
Nutritional administration is adjusted to the clinical condition, hemodynamic, and patient's tolerance.
Result
During treatment, the patient's energy intake reach 30 kcal/kgBW with protein of 1-1,3 g/kgBW.
Two patients experienced negative nitrogen balance at the end of treatment due to inadequate protein intake and severe hypercatabolism.
Two patients with adequate protein intake (1.1–1.2 g/kgBW) had normal nitrogen balance.
Three patients had complications of sepsis and one patient had a pressure ulcer. One patient developed malnutrition and sarcopenia during treatment.
Two patients with a normal nitrogen balance were able to pass the critical phase and step down to the ward.
Two patients with negative nitrogen balance died during intensive care treatment.
Conclusion
Medical nutrition therapy and adequate protein intake in critically ill obese patients with AKI can improve clinical conditions,increase survival, and reduce mortality.