Terapi Medik Gizi Pasien Kanker Kepala-Leher yang Menjalani Kemoradiasi disertai Acute Kidney Injury: Serial Kasus = Medical Nutrition Therapy on Head and Neck Cancer Patients Undergoing Chemoradiation with Acute Kidney Injury: Case Series

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Abstrak

Pasien kanker kepala-leher berisiko tinggi mengalami malnutrisi disebabkan oleh perubahan metabolisme, lokasi tumor, serta gejala toksisitas akut akibat kemoradiasi. Terapi medik gizi secara dini sejak pasien terdiagnosis kanker untuk mencapai asupan energi dan protein yang adekuat, didukung asupan branched-chain amino acid (BCAA) dan eicosapentaenoic acid (EPA) sesuai target, serta aktivitas fisik dapat menjaga massa otot dan status gizi pasien. Acute kidney injury (AKI) merupakan efek toksisitas obat kemoterapi berbasis platinum yang sering dialami pasien. Kondisi tersebut dapat menghambat optimalisasi pemberian nutrisi khususnya protein pada pasien kanker. Tiga dari empat pasien serial kasus sudah mengalami penurunan berat badan drastis, juga pre-kaheksia atau kaheksia sebelum mendapat terapi medik gizi. Selama menjalani kemoradiasi, asupan keempat pasien mengalami penurunan akibat gejala toksisitas akut yang semakin memberat mulai minggu ke-2 radiasi, sehingga tiga dari empat pasien tidak dapat mencapai target asupan energi dan protein pada sebagian besar pemantauan, dengan kisaran antara 6–41 kkal/kgBB/hari dan 0,3–1,6 g/kgBB/hari. Pemberian oral nutrition supplements (ONS) dan nutrisi enteral melalui nasogastric tube (NGT) membantu pemenuhan makronutrien, mikronutrien, serta nutrien spesifik. Berbagai studi menyatakan bahwa pasien yang mendapat terapi medik gizi disertai konseling nutrisi rutin mengalami penurunan berat badan lebih sedikit selama menjalani kemoradiasi. Keempat pasien serial kasus ini mengalami penurunan berat badan >10% selama menjalani kemoradiasi, terutama dari penurunan massa otot. Pasien juga mengalami penurunan kapasitas fungsional dan kualitas hidup. Dua orang pasien yang mendapat terapi medik gizi sejak sebelum kemoradiasi disertai asupan nutrien spesifik sesuai target, dengan rentang asupan BCAA 3,5–16,2 g/hari dan EPA 1–1,38 g/hari, mengalami penurunan berat badan dan kualitas hidup relatif lebih sedikit dibanding dua pasien lainnya. Dibutuhkan asupan energi 30 kkal/hari dan asupan protein 1,2 g/hari disertai peningkatan aktivitas fisik untuk mempertahankan atau meningkatkan massa otot. Penurunan asupan masih dapat terjadi hingga beberapa minggu pascakemoradiasi, sehingga pemberian terapi medik gizi juga harus dilanjutkan setelah terapi kanker selesai.

.....Patients with head and neck cancer are at risk of malnutrition as a result of the metabolic alteration, site of their cancer, also acute toxicity following chemoradiation therapy. Early nutrition intervention consisted of adequate energy, protein, BCAA, and EPA intake, including physical activity initiated immediately after diagnosis was made, may maintain skeletal muscle mass and nutritional status. Platinum-based chemotherapy drug-induced nephrotoxicity can hinder the optimization of protein intake in cancer patients. Three out of four patients in this case series had experienced severe weight loss, also pre-cachexia and cachexia before initiation of nutrition intervention. Energy and protein intake of three patients remained insufficient until the end of chemoradiation therapy, ranged from 6–41 kcal/kg/day and 0,3–1,6 g/kg/day. These inadequacies were mainly caused by acute radiation toxicities that worsen as radiation went on. Oral nutrition supplements and enteral tube feeding may help to achieve adequate macronutrient, micronutrient,

and specific nutrient intake. A number of studies demonstrated that regular dietary counseling during chemoradiation was associated with less weight loss. All patients in this case series suffered from weight loss >10%, mainly from skeletal muscle loss. Functional status and quality of life during chemoradiation therapy were also reduced. Better quality of life and less weight loss were seen in two patients who received early nutrition intervention and reached the daily intake target of specific nutrient, ranged from 3,5–16,2 g/day for BCAA and 1–1,38 g/day for EPA. Energy intake 30 kcal/day and protein intake 1,2 g/day combined with increased physical activity are needed to maintain or increase muscle mass. Side effects of radiation can last for months after treatment; therefore, nutrition intervention should be continued to maintain good nutrition after radiation therapy.