Alternative Ketogenic Diet with Coconut Milk in a Case with Underlying Colorectal Cancer

Sir,
The nutritional modification is a common practice for a cancerous patient. The use of nutritional modification is considered a classical alternative management. Here, we present a case with underlying colorectal cancer with lung, lymph node, and bone metastasis. The patient got complete standard surgical, chemotherapy, and radiotherapy management. The patient used additional alternative nutritional modification and selected ketogenic diet. The concept of this practice is “forcing cancer cells to use mitochondrial oxidative metabolism by feeding ketogenic diets that are high in fats and low in glucose and other carbohydrates would selectively cause metabolic oxidative stress in cancer versus normal cells.”[1] It is evidenced that “ketogenic diet may also be beneficial as an adjuvant cancer therapy” adding to classical antitumor effect of chemotherapy and radiation treatment.[2] However, the main problem in this practice is the induction of severe ketosis and hypoglycemia which can be fatal if there is no good control.[3] In the present case, the designed energy sources from nutrition plan were lipid 70%, carbohydrate 20%, and protein 10%. He ingested no flour and sugar except from tomato juice and vegetable. The source of protein was red meat. However, the patient selected to use coconut milk instead of medium chain triglyceride (MCT) oil. The patient visited our center for consultation on the nutritional management. At this visit, the patient's serum ketone (beta hydroxyl butyrate) was equal to 4.8 mg/dl (normal range 0.5–3 mg/dl). His blood sugar was normal, 90 mg/dl. The clinical nutritionist suggested the patient to change from coconut milk to commercial MCT oil. However, the patient denied and practiced in the previous style. At 1-month follow-up, his blood sugar equaled to 110 mg/dl. This observation is very interesting since the general ketogenic diet usually results in low blood sugar, not more than 90 mg/dl. This might be due to the use of coconut milk.
A 45-year-old previously healthy housewife was admitted with high-grade intermittent fever and bilateral neck swelling for 1 month. She used to live with cats. She had no history of addictions. On examination, she had a fever of 100°F, tachycardia, and normal blood pressure. She had mild pallor and multiple lymph nodes in the submandibular and supraclavicular regions bilaterally; however, a repeat lymph node biopsy showed effacement of architecture replaced diffusely by large atypical cells with eosinophilic cytoplasm, ill-defined cell borders, irregular/round vesicular nuclei and eosinophilic nucleoli; CD15, CD30, CD10, S100, Bcl 6, and MIB negative (CD20 positive and CD3, CD5, CD10, CD23 negative). The peripheral smear was normal. A cervical lymph node biopsy showed numerous microgranulomas. Power Doppler sonography was performed; the left submandibular region was enlarged cervical lymph nodes largest of 3.8 cm, firm, nontender, and hypoechoic with central cystic areas. The patient was started on cotrimoxazole. One month after starting cotrimoxazole, she was readmitted with continuing fever and increase in size of the cervical nodes. Her blood counts and chemistries were normal. A chest X-ray was normal. Cervical lymph node biopsy showed numerous microgranulomas. The patient was diagnosed to have CL secondary to toxoplasmosis and had coexisting toxoplasmosis and diffuse large B-cell lymphoma. We describe a 45-year-old woman who potentially malignant lymphoproliferative disorders, lymphadenopathies, like Kikuchi's disease; and atypical lymphomas include: infections like HIV or Epstein–Barr virus (EBV); autoimmune, hypersensitivity, or other benign disorders including sarcoidosis; benign reactive lymphomas include: infections like HIV or Epstein–Barr virus; and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

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Conflicts of interest
There are no conflicts of interest.

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