‘HIV/AIDS, TB and Nutrition’ – ASSAf Report

HIV infection and nutrition

HIV infection is associated with weight loss and wasting, both of which are independent contributors to poor clinical outcome. The reasons for the weight loss and wasting are multifactorial, and include the increased resting energy expenditure, food scarcity, and decreased absorption of ingested food due to gastrointestinal disease or viral disruption of the intestinal mucosa. Although a 10% or greater loss of body weight over a year is not uncommon in HIV, there is in fact a high degree of variability in the extent of weight loss and wasting which, not infrequently, is causally associated with secondary infection. Whole-body protein turnover may be as high as 25% in untreated HIV sufferers, leading to cachexia. Also, as already mentioned, resting energy expenditure is increased by 10% in HIV-infected people.

It would therefore appear to stand to reason that nutritional intervention in people with HIV infection will improve survival and/or quality of life, but hard evidence to this effect is woefully lacking. Very few randomised, placebo-controlled trials have been conducted in this regard. There is preliminary evidence, however, that specific dietary supplements such as amino acid mixtures increase body weight and reduce HIV viral load. Supplementation with medium-chain triglycerides reduces HIV-associated intestinal dysfunction and fat malabsorption. And ready-to-use therapeutic food improves nutritional status in severely malnourished children.

Micronutrients (vitamins and minerals) are essential to immune function, and deficiencies may therefore act as cofactors in HIV transmission and progression. Micronutrient deficiencies are common in HIV-infected people. Multivitamin supplementation has been shown in observational studies to result in a 40 - 48% slower progression to AIDS and a 40 - 60% reduction in the risk of death after 8 years of follow-up. But here again, there is an unhappy lack of sufficiently powered randomised controlled trials to confirm these benefits.

The World Health Organization, the Southern African HIV Clinicians Society and the Department of Health have all published guidelines for nutrition in HIV/AIDS that have been collated in the ASSAf report. But the report also identifies gaps in our knowledge regarding HIV and nutrition, and recommends areas and topics that ought to be prioritised for research.

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