ARTIGO ORIGINAL

Presentation of Cancer Reversal Nutrition Physical Program (CRNPP)

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ABSTRACT

This study aimed to review the national and international literature on the benefits of sprouted wheat as an alternative source of vitamin B12. Since it is an inexpensive food and easily accessible worldwide, this could be better used in nutritional therapies in conjunction with conventional treatment to optimize its effects and shorten the rehabilitation of the patient's immune system during chemotherapy and radiotherapy. Given the general deficiency of food in the world, especially those with good quality protein, it is interesting to research procedures that could improve the nutritional value of2 foods available. The sprouted wheat is a food that could be better used in therapeutic diets, because besides being an affordable and low cost food, is great source of B vitamins, especially vitamin B12, containing 4.8 micrograms of B12 per gram of germinated wheat (19). (The sprouted wheat still have significant concentrations apigenin and flavonoids, substances also found in fruits and vegetables, and which have an important role in inhibiting cancer cells). We will also present a program of nutrition and physical activity to support the reversal and remission of cancer.

Keywords: Sprouted wheat, vitamin B12, sprouted wheat and vitamin B12, nutrition and cancer.

1 - INTRODUCTION

Wheat is a grain nutritionally rich and full. Its history began thousands of years ago in Europe, where the first flours were made from the grinding of rough stones[1]. Given the general deficiency of food in the world, especially those with good quality of protein, it is interesting to research procedures that could improve the nutritional value of foods available[2]. The whole sprouted wheat is one of the nutriments that could be better spent on therapeutic diets, because besides being an affordable and low cost food, it is a great source of B vitamins, especially B12, containing 4.8 µg of this vitamin per gram of sprouted wheat[3], with good bioavailability[7]. The sprouted wheat have high concentrations of apigenin and flavonoids which are substances also found in fruits and vegetables that an important function in inhibiting the growth of cancer cells[4].

The World Cancer Research Fund (WCRF) concluded that the use of whole grains is a protective factor against cancer of the colon and rectum. Thus, the agency recommends the consumption of whole grains daily and in all meals[6]. The benefits of whole grains are obtained through eating grain in full, which is not the case of polished grains or refined flours[6].

The treatment known as "Cancer Reversal Nutrition Physical Program" (CRNPP)[7] was developed by a Brazilian physician, Sidney Federmann, based in an International Journal, Nutrition and Cancer, in the Reports "Food, Nutrition, Physical Activity, and the Prevention of Cancer: a Global Perspective" (WCRF 2007), "Diet, Nutrition and Cancer" (National Academy Press, Washington, DC 1982), "Diet, Nutrition and The Prevention of Chronic Diseases" (WHO 2003), in the international literature, and on the assessments made in over 700 cancer patients. (ongoing research). CRNPP is wide, all foods with known anticancer components are used: tea, especially green tea, whole grains, legumes, raw vegetables, whole fruits, milled flax seeds and sesame seeds, tofu, shiitake mushrooms, seaweed, misso

(folder fermented soy), sea salt, depriving the patient's consumption of animal proteins, because the relation between animal protein and cancer risk might be due to the effect of the upregulation of insulin-like growth factor 1 (IGF-1) activity, which is indicated as a cancer promoter. Animal protein and in particular, dairy protein, may raise circulating concentrations of IGF-1. This hormone has been shown to be associated with development and increased risk of breast, prostate, colorectal, thyroid and bladder cancer[21, 22]. And, in counterpart, wheat, flaxseed and lentil sprouts are added at every meal, even prolonged remission of the disease, which takes around at least one year or more, depending on the case[8].

After observing the positive evolution of patients in therapy, the Cancer Preventive Nutrition Physical Program (CPNPP) is indicated. Mainly fish, lesser frequency chickens, farm eggs, are added in, not returning to using meat, processed meat, milk and its derivatives for they are related to the progression of breast, colorectum and prostate cancer[6, 7, 21].

This revision study aimed to clarify the viability of consumption of sprouted wheat to meet the needs of vitamin B12 in the restrictive diets of animal foods and disseminate important preventive and curative discoveries of sprouted wheat, lentils and flaxseeds consumption in relation to cancer reversion and remission, associated with inhibiting cancer nutrition, physical activity and daily exposure to the sun for vitamin D production, increasing the formation of 1,25-dihidroxy vitamin D3, anti-cell proliferative.

2 - METHODOLOGY

A bibliographical research in the national and international articles published on the topic in recent years was performed. The search for information on the subject was conducted in databases as Scielo, Google Scholar, Capes journals, publications of international and national organizations, using the following descriptive terms: wheat, whole, sprouted wheat, whole wheat, sprouted grains, germination and nutrition.

Sprouted wheat

There is a growing interest in the consumption of sprouts due to demand for natural foods of high nutritional value[9].

Germination is possibly one of the most ancient, simple and economical processes employed to improve the nutritional value of cereal grains and legumes[10]. As cooking seeds, germination is a kind of pre-digestion. But, unlike what happens in cooking, there is no loss of nutrients in germination. The highest point of vitality in the life cycle of a plant occurs when it is a bud, hence their nutritional benefits. To germinate, some nutrients in cereals and legumes multiply. This is the case of vitamin C which is virtually nonexistent in dry grain wheat, but once germinated, its content increases six hundred percent[11]. It is also good source of vitamin B12, every gram of sprouted wheat contains 4.8 micrograms of this vitamin[3,7,8]. The daily requirement of vitamin B12 to humans is 2.8 microgram[3]. The germinated wheat also contains apigenin, a potent bioflavonoid that inhibits leukocyte adhesion to endothelial cells, reduce myelotoxicity related to chemotherapy[23] and it has an anti-inflammatory effect[12]. The sprouted wheat can be produced easily by the consumer and enables a variety of recipes well accepted among supporters of the natural nutrition[13]. One way to sprout is to let the wheat submerged in a glass with water 24 Hs and another 24 Hs on a wet filter-paper inside a small box. Appearing a little root in each grain, start consumption, to be complete in 2 days. Lentils sprout the same way. Flaxseeds don't need to leave submerged in a glass with water 24 Hs.[3] Flaxseed sprouts induce apoptosis and inhibit growth in human breast cancer cells.[24]

In general patients who follow the "CRNPP"[3,7] maintain high levels of vitamin B12 in the blood. If they present levels below average, they will need drug supplementation until there is prolonged remission of the disease, when they can start to use small amount of animal products[3, 7].

Vitamin B12

Vitamin B12, or cyanocobalamin, is a water soluble vitamin, synthesized exclusively by microorganisms found in nearly all animal tissues and stored primarily in the liver as adenosylcobalamin. This vitamin is essential for the increase in cell replication and in the formation of erythrocytes. Its deficiency can lead to diagnosis of megaloblastic anemia, glossitis, hypoxemia, and gastrointestinal disorders[15]. Due to these aspects, this deficiency should be considered an important public health problem, especially among older people and individuals who adopt a strict vegetarian diet[15]. Clinical symptoms of B12 deficiency, can take until 6 years to appear, due the reserves of the body,[16]. The main sources of this vitamin are animal products (meat, eggs, poultry, fish, milk and derivatives), however, high daily use of dairy and meat is associated with risk of several cancers, diabetes mellitus and cardiovascular disease[3, 5, 6].

Cancer

Cancer, according to WHO, is the second leading cause of death in most countries, including Brazil. It reached at least nine million people each year and killed around five million, about 15 years ago[17]. In 2010, it reaches more than ten million people and kills about seven million and half.[25] The diet is one of the most remarkable factors among the multiple risk factors for cancer[15,17,18,19]. Federmann reported[7] 7 cases of different types of neoplasias submitted to CRNPP, in 5 of them no influence of Qtx or Rtx, demonstrating its independent value. We add an eighth case treated by the author.

Case 1: CACC, 45 years, female, inoperable anaplastic astrocytoma. Rtx + Temodal without result. Following 8 years, total regression of the tumor.

Case 2: ABC, 50 years old, male, parotid undifferentiated metastatic carcinoma. Parotidectomy. Refused Rtx and Qtx. CRNPP for 1 year, CPNPP for 29 years. Currently aged 80, tumor-free.

Caso 3: JDS, 42 years old, male, undifferentiated esophagus carcinoma, esophagectomy, Rtx, relapse, large neck metastasis After 4 months, complete regression of cervical metastatic tumor. Patient was running almost 5 miles a day. After more 6 months, abandoned CRNPP, recurrence and died.

Case 4: PHC, 38 years old, female, recurrent pelvic desmoids fibromatosis with indication for amputation of the right leg in the hip joint in 2003. Parcial regression and the amputation was not performed. Following 11 anos. Patient does not practice physical activity. Patient leads a normal life.

Case 5: OML, 38 years old, male, rectal cancer, biopsy, CRNPP+Qtx+Rtx. After 8 months, disappearance of rectal tumor, surgery has been suspended, following 7 years. Currently CPNPP.

Case 6: ELB, 50 years old, male, prostate biopsies 18 fragments, adenocarcinoma in two. Practice CRNPP for 20 months, prostate biopsies 24 fragments, normal. Curren tly following 24 months, CPNPP.

Case 7: CMC, 12 years old, male, brain anaplastic ependymoma, Qtx, surgery, CPNPP, recurrence after 12 months. New surgery, Qtx, CRNPP, no recurrence for 28 months. Following for more than 3 years.

Case 8: LRO, female, 26 years old, 7 weeks pregnant, tumor in the left ovary with indication for interruption of pregnancy and immediate initiation of chemotherapy. But the patient decides not to interrupt the pregnancy and try to save the child. CRNPP during pregnancy, CPNPP after pregnancy (for 5 months) until now. Latest tests reveal no presence of tumor. Normal activities.

Cases 1, 2, 3, 4 and 6, had no influence of Qtx and Rtx, Results was obtained only with CRNPP. Case 7 recurred after 12 months using CPNPP. No recurrence after 28 months using CRNPP. Case 4 without physical activity, tumor has shrunk, stabilized for 11 years, but not disappeared.

Recently, Cheng, from Monash University, Australia, described one case of regression and remission for 1 year and a half of abdomen metastatic endometrial carcinoma, without Qtx , through the Lim Lifestyle, which is similar to CRNPP.[26]

CRNPP, includes:

1) Inhibitory Carcinogenesis Nutrition
2) 60 minutes of aerobic exercises daily. (progressively) This decreases the plasma levels of insulin, IGF-1 and sex hormones, increases 100 fold levels of cytokine IL-6, with an anti-tumor activity.[6]
3) Vitamin D: it takes 10 minutes of sun exposure, at noon, which beachwear or 20 minutes in the arms, head and neck, to produce 10.000 IU of vitamin D. We need about 500 IU per day. We recommend this daily exposure, without sunscreen.

It is necessary medical and nutricional follow-up monthly, monitoring blood levels of vitamins B12 and D.

CONCLUSION

In contrast to the abundant epidemiological, experimental and clinical evidence of the role of diet in the genesis of neoplastic processes, there is little information on the effect of dietary factors on cancer process already developed. Publications about the subject are emerging. Federmann standardized CRNPP. It should be offered to cancer patients to improve their prognosis. More publications are required.

Few studies on sprouted wheat, but also other types of sprouted seeds, have been published so far in Brazil19, 20. The sprouted wheat can best be used for the maintenance of health and supporting in chemotherapy and radiotherapy treatments, making it an alternative source of vitamin B12, capable of meeting the recommendations, assisting in patient's immune system and contributing to the optimization of conventional treatment. It is not indicated to keep a supply of this vitamin for a very long time only with sources of plant origin without medical-nutrition follow-up.

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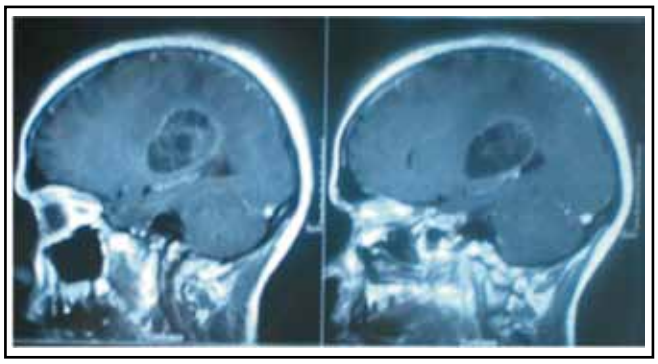

Fig. 1 - 2004: MRI with anaplastic astrocytoma

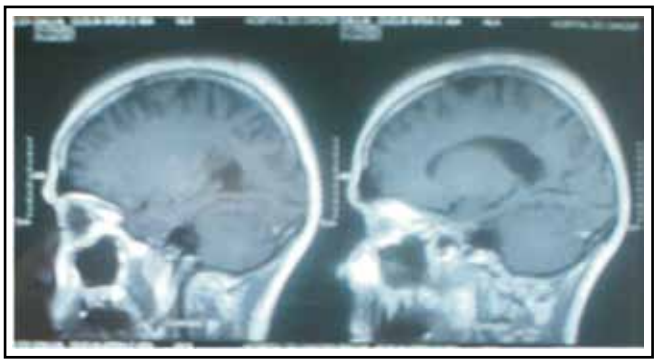

Fig. 2 - 2010: MRI without cancer, just gliosis

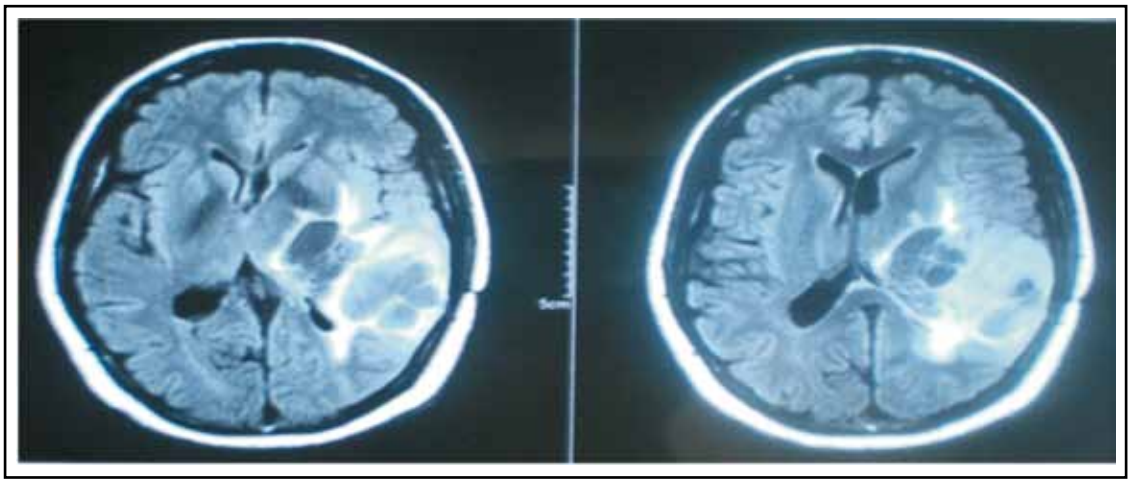

Fig. 3 - March 2004 MRI: Period of stereotactic biopsy. Temporo-parietal lesion left with adjacent edema and gliosis.There's midline shift.

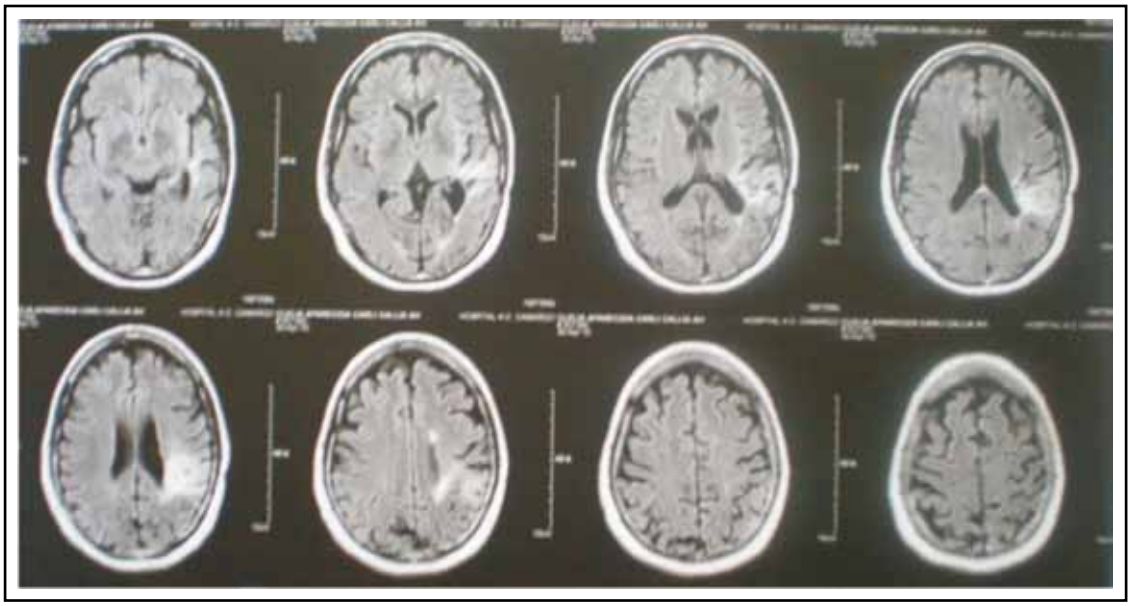

Fig. 4 - April 2010 MRI: A signal charge of brain parenchyma in the left parietal region without post-contrast enhancement. Presence of gliosis in the periventricular deep white matter. Ventricular system, tanks and structures trunk are preserved.

Fig. 5 - Reversion Nutrition: From left to right: sprouted wheat, fresh fruit, bean curd (tofu), with raw vegetables, green tea, brown Rice with sesame seed or sprouted flax and lentils, flavored with onion, garlic, chives and parsley. (Breakfast).

Fig. 6 - Lunch and Dinner: Form left to right: Green tea, fresh fruit, misso soup (fermented soybeans) with shiitake mushroom, tofu, seaweed and cooked vegetables.
Main Course: Brown rice with sesame, seeds or flax, raw vegetables, sprouted wheat and lentils, flavored with onions, garlic, chives and parsley.