Cancer and Alternative Medicine

It is a popular belief that the psychological response to a diagnosis of cancer influences survival; however, research has produced contradictory results: 179 patients with non-small cell lung cancer participated in a randomized prospective trial with four treatment arms that compared accelerated and conventional radiotherapy with and without carboplatin chemotherapy. Two questionnaires assessing optimism were completed, once prior to commencing treatment (n=179) and again after treatment (n=148); 171 died during the study with only 8 surviving. There was a small but significant reduction in optimism scores after treatment (p=0.005). There was no association noted, neither between pretreatment optimism and progression-free survival in any of the four treatment arms (NS), unadjusted or adjusted for performance status and patient age, nor between pretreatment optimism and overall survival, both unadjusted and adjusted for disease stage (NS). The authors found no evidence that a high level of optimism prior to treatment enhanced survival in patients with NSCLC. Encouraging patients to “be positive,” they said, may only add to the burden of having cancer while providing little benefit.


Comment: Overall classification of enrollees at baseline varied from stage I to stage IIIB; specific survival statistics are not presented by initial stage, although the authors do state that the only prognostic factor eligible for inclusion was disease state, and that adjustment for stage made no difference in their conclusions. 67% were squamous cell cancer and 37% non-squamous cell types; one has to assume that survival curves for the different cell types were equivalent, although no data was presented. Although these data show no effect on optimism/pessimism, other studies (see below) have come to different conclusions. It is very difficult to control for the attitudinal influence of the physicians working with cancer patients. The majority of oncologists to whom I have referred patients have been pessimistic. Although I have no controlled study evidence, it makes sense to me that patients absorb to greater or lesser degrees the optimism/pessimism of their doctors. Optimal studies would also include data on attending physicians who have completed their own psychological instruments. And the authors admit they might have beneficially included data on marital status and education, which might have influenced survival.

Head and neck cancer and optimism

Dispositional optimism was evaluated at baseline in 101 patients with head and neck cancer, using the Life Orientation Test translated into French: 51 were alive at 1 year after diagnosis, 45 were deceased and five lost to follow-up. Adjusting for known predictors of head and neck cancer survival, the OR for death within one year in pessimistic subjects was 1.12 (95% CI 1.01-1.24) and 4.14 for those living alone at baseline (95% CI 1.21-14.17) v. subjects optimistic at baseline.


Comment: Data suggested that dispositional optimism and living with a companion in these French head and neck cancer patients predicted better 1-year survival independent of other sociodemographic and clinical variables. Different psychological instruments are used in these types of studies, and all may not yield the same precise data. Again, the marital and/or companionship factor loomed rather large, with social isolation nearly quadrupling the risk for mortality.

Breast cancer and coping strategies

One-hundred seven women with early breast cancer were investigated for coping strategies and disease outcome 6 years after primary surgical treatment (mastectomy or lumpectomy). Analysis revealed no significant correlations between coping strategies (assessed by the Zurich and Freiburg Questionnaires of Coping with Illness) and breast cancer survival. However, significant relations were found between postsurgical tumor size (p<0.01), positive histological node status (p<0.01) and mortality. Discriminant analysis indicated that somatic parameters are more important for the course of breast cancer than psychological aspects of coping.


Comment: These authors found biomedical somatic parameters predictive of mortality with no influence of psychological factors.

Lung cancer and coping strategies

In 103 lung cancer patients, psychological variables were assessed by self-report and interviewer ratings. 92 died in 8 years of follow-up. Self-reported depression (p=.007) and the interviewer-rated emotional distress (p=.04) were associated with shorter survival, independent of the influence of biomedical prognostic factors. However, the naturalistic design of the study did not allow for any causal interpretation.

**Comment:** So these authors concluded that depression and interviewer ratings of distress (anxiety) were prognostic of shorter survival. They appropriately indicate no cause-effect could be inferred from their work.

**Breast cancer and attitudes**

In a prospective open trial of assessment of attitudes in 57 breast cancer patients, those with either a fighting spirit and/or denial had longer survival in 13-year followup (p=0.002) than those with baseline helplessness/hopelessness and stoic behavior. The initial psychological response was the best predictor of the survival time over all other factors. Pettigale KW et al. Mental attitudes to cancer: an additional prognostic factor. Lancet 1985 Mar 30; 1(8431):750

**Comment:** Sometimes "old" studies can be instructive. This dichotomy in survival numbers matches the experience of many practitioners. Note the author’s conclusion: initial psychological response was the best predictor of the survival time.

**Cancer and pessimism**

Two-hundred thirty-eight patients with a variety of cancers and receiving palliative radiation treatment were followed for 8 months, during which 70 died. Controlling for cancer site and level of symptomatology at baseline, a pessimistic life orientation was an important risk factor for mortality, but only among patients age 30-59. Depression or optimism did not yield significant associations for those <30 or >60. Schulz R, Bookwala J, Knapp JE et al. Pessimism, age, and cancer mortality. Psychol Aging 1996 Jun; 11(2):304-9

**Comment:** These authors conclude that pessimism was a factor in survival in cancer patients age 30-59. In working with patients with cancers which progress, there is an ethical responsibility to bring a sense of reality about the likely prognosis. Patient surveys indicate that most want to hear the truth about their likely survival. At the same time, it is helpful to be totally honest about the widespread variation in survival statistics. It is also legitimate to mention from case histories or one’s own experience the stories of prolonged survival or recovery which exceeded all expectations. The 1,000-plus case histories in O’Regan and Hirshberg’s collection of “spontaneous” remissions (Institute of Noetic Sciences, 1993) is a good starting point. And this collection of reported cancer recoveries is probably the tip of the iceberg; editors often hesitate to publish these types of case histories (see below). When the entire spectrum of possibilities is explained to a patient with cancer, s/he will hear what s/he wants to hear along the continuum of optimism/pessimism. What I must say after seeing hundreds of cancer patients is that I have never experienced a downside from framing a set of optimistic possibilities for the newly diagnosed cancer patient. No one in an advanced state of cancer decline has ever admonished me for being initially optimistic.

**Longevity and positive attitude**

Of 660 individuals age ≥50 (322 women) completing the Ohio Longitudinal Study of Aging and Retirement (OLSAR), median survival in those with positive attitudes on aging ("As I get older things are better than I thought they would be") was 22.6 years vs. 15.0 for those with negative attitudes ("worse than I thought") (2p<0.001). This advantage remained after age, gender, socioeconomic status, loneliness, and functional health were included as covariates. It was also found that this advantage was partially mediated by the will to live. Levy BR, Slade MD, Kunkel SR, Kaal SV. Longevity increased by positive self-perceptions of aging. J Pers Soc Psychol 2002 Aug; 83(2):261-70

**Comment:** The findings suggest that the self-perceptions of selected groups can influence longevity. While this study did not specifically address cancer, the optimistic attitude of "as I get older things are better than I expected" was associated with a 7.5-year longevity benefit compared to the opposite "worse than I expected" attitude. This benefit remained after controlling for a number of variables. What determines the worldview of optimism and pessimism? A precise answer is not easily forthcoming, but certainly conditioning experiences, parenting and parental relationship including emotional closeness, the belief systems of parents and influential adults, experiencing a high ratio of loving supportive/pejorative critical life experiences and growing into feelings of being important and competent all make substantial contributions. I think spiritual, religious, early health and community experiences also exert their influence. Can attitudes of optimism/pessimism be changed? In my experience the answer is yes. Acquiring life skills, learning voluntary controls (meditation, biofeedback), using imagery and affirmations have had striking effects in patients with whom I have worked.

The following cancer cases from my files have never been published in their entirety. They add to the discussion above, but also probably underscore my own bias.

**Carcinoma of the Ovary: A Case Report of “Helen B”**

A 67-year-old new patient came to me in the spring of 1985. For anonymity, I call her Helen B. She worked as a hairdresser. Shortly thereafter she presented for an interval physical examination, during which I felt something vaguely abnormal in her vagina as if there were a mass present. Though she had previously had a hysterectomy, it was as if part of her cervix had been left behind, or she had formed an excessive amount of scar tissue. At this time her lab reports included: ALP 181 U/L (normal 31-122); ALT 61 U/L (<36); LDH 528 U/L (100-225); HGB 10.4 g/dl (12.7-14.8), HCT 30.5% (37.5-45.4). I referred her to a gynecologist, but she procrastinated, believing that her previous physician had described these same findings several years before. We lost about six weeks trying to get her previous medical records, before ultimately finding that both of her previous doctors were retired and her records could not be located. I re-examined her six weeks later and the now definitive mass was significantly larger.

By this time her liver function tests: ALP 339 U/L; ALP 111 U/L; LDH 957 U/L, globulin 3.4 g/dl (1.7-3.1). I viewed all these as ominous and became very insistent that she follow advice. She finally agreed to an ultrasound and a liver scan and then a visit to a gynecologist "if the tests show something." She did not have the studies done, but did visit the gynecologist who found a mobile mass estimated to be 12 x 15 cm. She then had an IVP, barium enema, liver scan and ultrasound. The liver scan was equivocal, and the IVP and barium enema suggested an extrinsic mass displacing the bowel. Ultrasound confirmed a mass in the left pelvis consistent with ovarian origin.
Psychoneuroimmunoendocrinology

From the gynecologist’s letter to me: “I spoke to them [Helen B and her husband] concerning the risks of this being a malignancy... Mrs. “B” is a very nice lady and appears to be strong willed. She is convinced that this is probably a benign process... She prefers to wait on the surgery until three weeks or so have passed because of her feeling of responsibility or commitment toward the new owner’s beauty salon she and her husband have just sold. I advised her the longer she delays the less likely she could be cured with surgery alone.”

In about a month she came to laparotomy, at which I assisted. A very large tumor mass was present in the left and central pelvis, extensively involving small and large bowel. In the face of a lack of a bowel preparation, definitive surgery was postponed. Widespread 3-9 mm. peritoneal lesions were studded throughout the pelvic and abdominal cavities, exceeding one hundred in number. Five of them were biopsied. The gynecological surgeon’s postoperative diagnosis was: “Large pelvic mass and possible ovarian carcinoma with tumor encroachment on small bowel in terminal ileum involving distal 2 to 2-1/2 feet as well as tumor involvement of serosal surface of descending colon; peritoneal studding of peritoneal surface of small bowel and peritoneal studding of pelvis.” The pathology report of the biopsies revealed: “Malignant tumor with moderate variation in cell size and shape. The cells contain irregular nuclei and abundant eosinophilic cytoplasm. The tumor appears as a poorly differentiated carcinoma possibly of ovarian origin.”

After a five-day bowel prep, definitive resection of the tumor was undertaken by a general surgeon. A large pelvic mass 22 x 18 x 7 cm. was removed en bloc. This included a 95 cm. length of small bowel in at least two sections. A 28 cm. length of large bowel was part of the resected specimen and the omentum was largely resected in a separate specimen. The pathologist’s final diagnosis was: “Large mass, terminal ileum and sigmoid colon: poorly differentiated carcinoma, of probable ovarian origin.” She was left with a colostomy and a remaining rectal colon segment, with obvious gross tumor remaining behind. The surgeon’s summary letter to me stated: “I recommended oncological consultation and commencement of chemotherapy. The colostomy does not need to be considered permanent and after the first course of chemotherapy, probably within six months, we should re-explore her, and at that time, we could close the colostomy.”

After recovery from surgery, the “nice lady” returned to my office, protesting her referral to an oncologist, and said to me “I want you to tell me what I have to do to get well.” She did have an unshakably optimistic belief in the fact that she would overcome the cancer and be well, with God’s help. I reinforced the necessity for a visit to the oncologist, knowing full well that she would refuse any treatment. I felt very uneasy about my relations with my colleagues if she did not complete that visit. Nonetheless, I outlined a program, including: regular meditation incorporating imagery of 1) tumor shrinkage and disappearance of the remaining cancer; 2) billions of strong white blood cells being produced from a strong immune system; and 3) seeing and feeling herself healthy, vigorous, and totally unlimited in her activities; using an audiotape of a standard relaxation routine followed by the imagery which I did in her presence in the office; a low-fat, low-sugar, high fiber diet with ample fruits and vegetables; elimination of meat from her diet and intake of all grains in unrefined form; supplements with a minimum of 100,000 IU/day of beta carotene, a gradual increase in vitamin C to 12 g/day and a megadose multivitamin-multimineral preparation which included vitamin E 600 IU/day, selenium 200 μg/day, calcium, magnesium, manganese, zinc, and B complex with approximately 100 μg/d of each B vitamin element. I suggested she modify her attitude toward her husband whom she perceived as critical and controlling, cancellation of all her demands on him (our definition of forgiveness). I emphasized regular aerobic physical exercise (swimming was the only feasible possibility, and was postponed until definitive reduction of the colostomy).

On my stern insistence, she relented and did obtain an oncological consultation. From the oncologist’s note to me: “...Some of this tumor certainly remains in her pelvis postoperatively. Mrs. [“B.”], however, is convinced that she has no residual cancer that requires treatment, or that any residual she does have will be cured by her own body with God’s help. She puts great weight on your opinion and said she would discuss any treatment with you. I made it clear to her that I was quite concerned that she has residual cancer and that as such, the time to treat would be now rather than later when the tumor is bulkier and our chances for a good outcome are much less. Her treatment clearly would not be without side effects and she’s aware of that, and this, too, makes her reluctant to undergo any therapy now when she’s feeling better from the surgery. Nevertheless, I did recommend chemotherapy now rather than later. She’s refused for the moment, but is going to discuss this with you. In the meantime I’m going to get abdominal CT scan and tumor marker studies to see if there is any gross residual disease elsewhere.”

In the meantime her blood picture and chemistries improved. Within a month after the colostomy surgery her hematoctrit was 40% and all previously abnormal liver function chemistries were normal. She began to look stronger and exuded confidence that she and God were winning the battle. Her belief in the divine was evangelistically optimistic and I reinforced her hope with every encouragement.

The surgeon was quite unwilling to undertake reduction of the colostomy until she had undergone chemotherapy for residual disease. She hated the colostomy and pestered the surgeon so persistently and assertively that he finally relented, and two and one-half months after her definitive resection, she went to surgery for a third time to have a bowel re-anastomosis. The surgery was long and tedious. The adhesions encountered merely entering the peritoneal cavity were among the worst I had ever seen, and several near-perforations of small bowel occurred in delineating the various structures. The hundreds of 3-9 mm. peritoneal tumors appeared as before. Seven of them from various abdominal and pelvic locations were biopsied. With extreme difficulty, the colostomy was taken down and an anastomosis to the rectal segment accomplished. She recovered well from this surgery. Three days later the pathology report on the seven biopsies of the tumors appeared in the chart and described: “Inflammatory tissue with moderate cell variation.” There were no malignant characteristics in the biopsied tissue. The surgeon’s only comment on the report was “She is a very interesting lady.”

“Helen B” continued to progress, recovering rapidly from this third surgery, and delighting in her return to normal bowel function and her positive laboratory reports. “I knew they would be o.k.” she said. She returned to hairdressing and continued to be gainfully employed; she took great delight in
regular attendance at the opera. She made a trip to Europe to revel in performances of Pavarotti and the best of the Milan Opera Company in Italy. She read Bernie Siegel's Love, Medicine and Miracles and participated in the audience at a television appearance in Seattle by Dr. Siegel. She had persuaded her husband to build an outdoor Japanese garden in which she continued her daily regular meditations. Her husband, however, was disturbed at her unwillingness to submit to the recommended conventional chemotherapy. Over this and other issues, the marital situation with her husband gradually deteriorated, and she was divorced about two years after her third surgical procedure. My sense was that this relieved one considerable stress in her life.

In 1987, approximately two years following her first visit with me, she developed a ventral incisional hernia at the site of the previous surgical operations. It became problematic and she underwent surgery for yet a fourth time to repair this large ventral hernia. At the time of operation, the surgeon with my assistance took advantage of the opportunity to briefly re-explore her abdomen. The adhesions were totally gone; there were no residual peritoneal tumors, and the peritoneal cavity was totally devoid of any evidence of cancer.

Following this re-exploration I attempted to get "Helen B's" case scheduled for my hospital's monthly tumor board review. I thought her recovery was a highly significant phenomenon which would interest many of our local physicians. The oncologist chairman, however, on finding that she had not had any definitive conventional treatment beyond surgery, refused to schedule a discussion of her case, saying "If she didn't have any additional treatment, we couldn't learn anything from her case." In the ensuing five years of her life, she exhibited no evidence of any recurrence of the ovarian cancer. She died at age 75 of totally unrelated causes, nearly eight years after her original encounter with cancer.

Did her immune system respond to the images, the change in attitude, the nutritional initiatives, the hope, the irrepressible optimism? There is no way that this question can find a definitive answer. I cannot prove that what she did and how she changed made any difference, and a single case doth not a paradigm make. I only know that I believe that the combination of treatment initiatives with her faith and belief as the capstone was the source of her healing.

Karl’s Malignant Melanoma

Karl was forty-one. I had been the family doctor for his wife, an RN, and their three girls in their growing-up years. I had seen Karl infrequently, however, and never for anything major. He had never been one to be interested in a comprehensive health evaluation, and indeed it took considerable urging by his insistent partner to be seen for anything. When I did see him, he seemed introverted, never talked much and seemed to have a mildly flattened affect as if depression might be lurking beneath the surface.

He presented at his appointment with an ugly-looking skin tumor about 8 mm in diameter on the right upper anterior chest above the areola. He had noticed it about a month before and thought that it had grown. It was slightly raised, and faintly reddish-purple. Because of its ominous appearance as a malignant melanoma, I took the time at that appointment to excise it with a generous margin.

While injecting the local anesthetic and performing the removal, I talked with him about what was going on in his life. He related that he had lost his job about 15 months before when his employer was taken over by another company. As I worked, he described his loss of self-esteem, feelings of shame and worthlessness as his family went through a financial crisis depending on his wife's income alone. They had spent their way through their savings and self-depreciation mounted as he failed time and again to land another job, with high anxiety over the possibility of having to take a significant cut in pay to work at all.

The pathology report in 3 days confirmed that the lesion was a Clark's level 3 malignant melanoma and possessing aggressive characteristics. His wound healed well and there was no evidence that the tumor had spread into the regional axillary glands or elsewhere. As I removed his sutures a week later, he was quite upbeat, having found a job in the interval. He was scheduled to start work the following Monday. I did suggest that he consult an oncologist, and later confirmed that he had declined in spite of his wife's urgings. Karl, however, remained well and over the years showed no signs of recurrence. I rarely saw him, but inquired of his status numerous times on seeing his wife.

Nearly ten years later, to my surprise, he presented with two hard lymph nodes in the right axilla. On biopsy they proved to be a recurrence of his malignant melanoma. I learned that about fifteen months earlier, he had lost the job he landed at the time of my original surgery, and again had become morose, withdrawn, defeated, depressed and exhibited profound loss of self-esteem. He had discovered the lumps four months before and had done nothing about it. He refused any treatment of any kind, and died quickly about four months later.

One is certainly prompted to ask in such a story, "What was the melanoma doing for nearly ten years?" Rationally, one must assume that there was residual tumor in the tissues for sometime. One can only conjecture that his immune system had held the tumor at bay for over nine years in which he was earning a living and felt happier and relatively good about himself. With onset of job loss, hopelessness and helplessness set in, causing the stress-related compromise of his immune defenses. I know of no other way to understand this phenomenon.
