Dynamic Chiropractic

DIAGNOSIS & DIAGNOSTIC EQUIP

Cancer and the Chiropractor

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Chiropractors have a great responsibility when the possibility of cancer arises among their patients. Chiropractors can never assume that the patient's allopathic or osteopathic physician has done every necessary evaluation to rule out the presence of cancer. When cancer presents as pain, the disease has probably been present for many months, if not many years. This does not mean, however, that the cancer cannot be cured. Every effort to do the proper diagnostic testing and to make the most appropriate referral to a cancer specialist, when indicated, should be on the mind of every chiropractor as he sees each and every patient.

Certainly, the cancer presenting as back pain will be a very likely event in the life of every chiropractor. Back pain from cancer may be produced by muscle spasms or bone pain and sometimes as viscero-somatic reflex pain with a distribution that allows one to localize the offending lesion. When a patient with back pain is referred to an oncologist, this almost always means that a diagnostic procedure such as CT scan, MRI, or possibly even a myelogram or EMG will be necessary. Obviously, a chiropractor cannot order these tests on every patient who presents to them with back pain. Certain x-rays may be part of your examination prior to manipulation and these are of course highly appropriate. However, most plain radiographs will not be diagnostic of cancer when it presents at an early stage, in the form of back pain. The most sensitive general test for bone involvement with cancer is the bone scan. This test is of limited usefulness for musculoskeletal back pain and thus poses a testing dilemma. The most sensitive, specific diagnostic radiological procedure is the magnetic resonance imaging (MRI) of the offending area and its neurological pathway. If an MRI is not available, then computerized tomography (CT) is nearly as useful.

Although laboratory testing of blood is never the only diagnostic tool which is appropriate to diagnose cancer, there are several blood tests which, if abnormal, will be particularly useful to guide your subsequent diagnostic and referral activities.

Alkaline phosphatase is a good test for liver obstruction or bone metastasis, and fractinated isoenzymes can differentiate between these two sources. Acid phosphatase remains a very useful tool for diagnosis of prostate cancer. However, a negative test does not rule out prostate cancer. Cancer of the prostate frequently produces prostate-specific antigen (PSA), which can be indicative of both the presence and quantity of prostate cancer. Among urologic oncologists, prostatic acid phosphatase has almost been replaced by the PSA when the purpose is to monitor response to therapy. A normal acid phosphatase should never be used in place of a digital examination of the prostate. Patients who have symptoms of prostatism, including urinary dysfunction, should always have a prostate examination done after drawing the acid phosphatase or PSA. This is because the digital examination itself may cause a transient rise in serum levels. Any palpable abnormality should be considered for fine needle aspiration in order to make a cytologic diagnosis.

Prostate cancer can be cured at many stages with surgery or radiation therapy. A urological oncologist, working together with a medical oncologist, will consider therapies including hormone manipulation, surgery, radiation therapy, and in some cases, chemotherapy. Newer modalities for the treatment of prostate cancer include immunotherapy and hyperthermia. When prostate cancer

presents as bone pain, the ability to cure with surgery or radiation has been lost. This does not mean, however, that the patient cannot be rendered free of detectable disease through hormonal therapies, chemotherapy, and possibly some new experimental modalities.

It is advisable to evaluate a number of different options for therapy. There are, however, some medical emergencies which may be associated with prostate cancer. This includes spinal cord compression, which can mimic lumbar disc herniation symptoms and must be differentially diagnosed. A diagnosis of cord compression often leads to immediate radiation therapy and sometimes surgery. It is important to emphasize that pain without any neurological signs or symptoms may be the first sign of impending cord compression. Hypercalcemia or other metabolic abnormalities associated with metastatic prostate cancer may also require immediate medical treatment.

In women, the most common metastatic cancer which presents as bone pain or back pain is breast cancer. Breast cancer rarely presents as bone pain without some history of breast cancer or the presence of a mass in the breast. Unfortunately, a breast mass may be easily missed on physical examination and sometimes even on a mammogram. Certain laboratory tests are part of any complete evaluation of suspected breast cancer. In breast cancer, the tumor marker which has been shown to be most valuable is the CA15-3. As in the case of prostate cancer and PSA, a negative or normal CA15-3 cannot be used to rule out the presence of breast cancer. However, an elevated CA15-3 is very unusual in the absence of breast cancer. CEA or carcinoembryonic antigen has diagnostic value in breast and other cancers besides colon cancer, but the CA15-3 is more specific for breast cancer. Referral to a medical oncologist is the best course of action when breast or prostate cancer is suspected as metastatic disease causing bone pain.

The two major cancers which show no particular sex distribution are lung and colon cancer. Both of these diseases are frequently diagnosed by bone metastasis producing bone pain. The same diagnostic issues and emergency exceptions hold for metastatic lung and colon cancer when it presents as back pain or bone pain. The diagnostic marker most useful for determining the presence of colon cancer is CEA. There are, however, some newer monoclonal antibiodies which may be available shortly, that may be even more specific for colon cancer. In the case of pancreatic cancer, which often presents very similarly to the bone metastasis of colon cancer, there is a marker known as CA19-9. Lung cancer often presents with elevated CEA and there are other tumor markers such as SCC and LASA-P which can be elevated in metastatic lung cancer.

Lung cancer which presents as bone pain usually has associated pulmonary symptomatology. All patients, but particularly smokers, should be questioned about cough, shortness of breath, or chest pain. A useful technique for detecting early stage lung cancer is the analysis of sputum cytology. This procedure, when done in the proper laboratory, can detect cancerous cells even before it is possible to see a tumor on a chest x-ray. In fact, a recent reanalysis of sputum cytology, using monoclonal antibodies against lung cancer cells, revealed positive results in a number of samples from patients who subsequently developed lung cancer. This was true despite the fact the test was thought to be ineffective as a form of screening when only cytological examination, without the monoclonal antibody histochemistry, was utilized.

Chest x-rays represent a relatively simple method for detecting lung cancer when it has grown to a recognizable size. Unfortunately, most lung cancers first detected by plain chest x-ray have progressed to a stage which is not curable by surgery. The chest CT is more sensitive than the plain radiograph and should be considered in any suspicious circumstance. Bronchoscopy, is of course, a standard diagnostic tool for lung cancer. Referral to a pulmonary specialist for the early diagnosis of lung cancer makes good sense. Some modern developments include the use of hematoporphyrin compounds, plus laser light-assisted bronchoscopy for diagnosis of very early

endobronchial lung cancers.

Many lung cancers have brain metastasis at the time of diagnosis. The most sensitive tool in this case is a MRI with gadolinium enhancement. Since therapy of lung cancer that has metastasized beyond curability by surgery alone almost always involves a medical oncologist, it is probably better to make the referral to him prior to further expensive diagnostic testing. Attention should be paid to more unusual presentations of lung cancer such as those where the symptoms are only a complaint of hoarseness or shoulder pain. Any symptom described by the patient which is not immediately explainable by known physical phenomena should be heard with a concern of cancer. Any suspected involvement of lung cancer should be referred to a medical oncologist.

The simple complete blood count is an inexpensive and useful diagnostic test available to the chiropractor. Anemia can be the only presenting sign of a gastrointestinal or rectal tumor. A referral to a hematologist or medical oncologist is certainly not required as long as a trained professional evaluates the anemia. On the other hand, a direct referral to a subspecialist who also practices general or internal medicine may be the most appropriate and often the least costly course of action.

Anemia, particularly when associated with abnormal leukocytes, is often the first laboratory evidence of leukemia, lymphoma, and myeloma. Any abnormality in numbers or percentages of granulocytes, platelets, lymphocytes, or myeloma should prompt a referral or additional testing.

Multiple myeloma may present with anemia, elevated percentages of lymphocytes, or even with no abnormalities in the complete blood count (CBC). Therefore, bone pain with a normal CBC still demands further testing or referral. Even radiographs may not differentiate multiple myeloma from osteoporosis or even from bone metastasis. If you suspect multiple myeloma, then serum and urine protein electrophoresis should be considered.

It is apparently a matter of personal practice, philosophy, and style, as to whether or not a chiropractor performs the necessary history taking, physical examination and appropriate laboratory or radiological testing to evaluate patients for various types of cancer. For years, chiropractors have strived for and have now achieved a position of independence and responsibility as a primary portal into the health care provider system. Doctors of all specialties have taken a sworn oath to serve their fellow man and, as such, have the responsibility to prevent, if possible, and to identify this life-threatening disease at its earliest manifestation. Appropriate recognition and referral as opposed to non-recognition or inappropriate referral, can save lives.

Our recommendation would be to end every patient encounter in the same way that we are ending this article. Educate your patients to a healthy cancer preventing lifestyle. Good nutrition, the proper utilization or nutritional supplements, and the avoidance of cancer producing foods, exposures, and behaviors can prevent cancer.

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