

UPDATE IN COLON CANCER

by: Gil Lederman, M. D.

In a National Cancer Database report trends for variety of cancers especially the most common cancers. The data includes variations in stage or extent of disease as well as treatments implemented and overall survival.

From 1985 through 1993, colon cancer data was evaluated including 36,937 patients in 1988 and 44,812 in 1993. This is a project of the Commission on Cancer of the American College of Surgeons and the American Cancer Society. The goal is to evaluate cancer care outcome in America.

Colon cancer is the fourth most common malignancy in adults and the second most common cause of cancer deaths.

Treatment was analyzed by the stage or extent of disease. While 28% of the 1988 patients had no reported clinical or pathologic stage, only 9% of the 1993 cases were so unlabeled. This suggests improvement in cancer care. There were differences as well as similarities in patients who developed colon cancers. When analyzed for age, area of the country, sex, incidence, economic level or ethnic background, there were no discernible differences.

However, in patients 80 years of age or older, the stage tended to be lower (less extensive disease) than in younger patients. Furthermore, black Americans were diagnosed at an earlier age than white Americans - with blacks being diagnosed on average at 66.4 years compared to 69.7 years for white Americans.

Excluding African Americans, all other ethnic groups had similar stage of cancer at presentation. African Americans had the highest incidence of Stage IV disease - the most extensive amount of disease. African Americans averaged 25.4% of Stage IV disease compared to 17.9% to 19.9% in other ethnic groups.

There was an increased incidence of right colon cancers in 1993 compared to 1988. This is a continuation of a previous trend on the right side of the bowel that has been long-standing.

The grade of the tumor represents the aggressiveness as observed by the pathologist under the microscope. Sixty-four percent of Grade I - the lowest grade or the least aggressive cancer - were Stage I or II, the earliest stages of colon cancer. Thirty-five percent and 31% of Grade III or IV respectively were Stage I or II. Thus, the more aggressive the tumor under the microscope the more likely the tumor was to be a greater stage.

Also, there was a relationship between the stage of disease and the location of the cancer. Sigmoid disease (located nearest the anus) had a likelihood of being Stage I in 25.6% of the cases while the ascending colon had only 19.4% of its primaries being early Stage I malignancies.

Recently published data shows that adjuvant or additional therapy after surgery improves outcome for those with colon cancer. Those with Stage III colon cancer are the most likely to benefit with a resultant decreased lower recurrence rate and longer survival.

According to data presented, 43% of patients received systemic or adjuvant chemotherapy. Chemotherapy was most commonly used in the Pacific area of the United States and least commonly in the Northeast area. Chemotherapy was also less likely to be used for patients older

than 70 years of age where it was given in 18.6% of patients and only in 5% of patients older than 80 years. For patients under 50 years of age, 36.7% received chemotherapy.

Additionally, small hospitals with less than 150 cases per year were less likely to administer chemotherapy than larger hospitals.

Lower grade and distal site of the primary were associated with better outcomes, though secondary to an earlier stage of cancer. Increasing age was noted to have a worse outcome by stage while sex and ethnic background did not. Low income adults had a 5 to 7% worse outcome than middle or higher income patients.

This study authored by Jessup, et al and appearing in the journal **CANCER** found several important points. The first is that while patients younger than 50 years of age have more advanced cancers. The second point was that African Americans tend to have colon cancer at an earlier age than white Americans so increased vigilance may be most important for this group of high risk patients.

The authors noted that staging systems to determine the extent of disease were better implemented in the later years. This would be a step toward improved treatment.

Also emphasized was that the grade of the cancer is important in determining outcome of therapy. Adjuvant therapy clearly has increased in use being implemented in 7.2% of patients in 1985 but 22.3% in 1993. The impact of chemotherapy on survival most likely will be felt in subsequent years of analysis because of the short follow up rendered. The authors did note improvement in survival in Stage III patients receiving adjuvant therapy.

Thus, this important demographic work should produce better care for patients and serve as a guideline for physicians caring for people with this highly common malignancy.

Our group at Radiosurgery New York has pioneered stereotactic body radiosurgery, which allows for more precise than usual and higher dose than usual radiation. By utilizing this combination of precision and higher dose, we are able to treat recurrent colon cancers – even in the abdomen, pelvis, chest, liver or lymph nodes and have a high control rate in that treated area.

It is an appealing option when more usual methods have failed to produce the desired outcome. Also, because of its precision, there is more relative protection of healthy tissues.