RECTAL CANCER AND INFLAMMATORY BOWEL DISEASE

By: Gil Lederman, M.D.

It is well known that those with inflammatory bowel have an increase risk of rectal cancer. The relationship between inflammatory bowel disease - both ulcerative colitis and Crohn's disease goes back to the 1920's.

Reports have been controversial as to outcome in rectal cancer and both studies reporting worse results and equivalent results to non-inflammatory bowel patients have been recorded for colorectal disease.

Why the interest in giving chemotherapy and radiation after the diagnosis of rectal cancer? Randomized studies have shown that giving both chemotherapy and radiation together decreases the likelihood of local recurrence and decreases the likelihood of cancer recurrence for those with rectal cancer.

Thus, there is an increase survival rate in rectal cancer patients who undergo chemotherapy and radiation. Some administer the chemotherapy and radiation after surgery. Others administer it before surgery to decrease the extent of surgery often in an attempt to preserve the anal sphincter and thus avoiding colostomy.

In a study by Green et al published in the International Journal of Radiation Oncology Biology and Physics an evaluation of 47 patients with ulcerative colitis and Crohn's disease diagnosed with rectal cancer over 34 years were analyzed.

Most patients were treated between 1980 and 1994 and charts were retrospectively evaluated. Of the 47, 35 had ulcerative colitis and 12 had Crohn's disease. Thirty one were males and 16 females ranging in age from 5 to 57 years with a median of 27 at the time of diagnosis of inflammatory bowel disease.

The median age at the time of diagnosis of rectal carcinoma was 48 years with a range of 25 to 72. All cancers were adenocarcinomas of the rectum. Surgery was involved in 44 of the 47 patients.

Twenty of the 44 patients received post-operative therapy with 12 receiving chemotherapy and radiation while 8 received chemotherapy only.

Three patients were felt to have cancers that could not be resected and received chemotherapy and/or radiation. Fifteen patients had radiation to the pelvis - 13 of these received chemotherapy with radiation.

A variety of different techniques were used over the years for radiation. Chemotherapy usually included 5FU. The five year survival rate was 42% overall. Disease-free survival was 43% and no cancer seen in the pelvis was 67%.

As cancers increased in stage, disease-free survival rates fell. The same was true as lymph nodes became involved or more aggressive cancers as observed under the microscope were noted.

For early cancer stagers, the local control rate was 60% in this group compared to 26% with advanced local disease. If no lymph nodes were involved control rate locally was 79%. If lymph nodes were involved this fell to 51%.

Did radiation help the patients? Well, the pelvic control rate was 60% if radiation was used

compared to 23% if no radiation was given.

The complications included skin reactions and bowel side effects. One patient was hospitalized for dehydration. There was said to be no long term complications in irradiated patients. While the ratio for colorectal cancer is 5% after 20 years and 12% after 25 years there is always concern about the development of cancers in the intestines of patients with inflammatory bowel disease.

While many radiation oncologists are reluctant to give pelvic radiation to those with inflammatory bowel disease these authors certainly believe that it is reasonable.

The authors concluded that patients with inflammatory bowel disease who developed rectal cancer have, "a natural history and treatment outcome similar to that of rectal cancer patients in the general population."

It did not, however, that the high-risk patients had a poorer outcome. Furthermore, it was recommended that aggressive therapy be given to those with high grade cancers in light of the poor outcome with standard or conservative measures.