HEPATIC METASTASES FROM COLORECTAL CARCINOMA

The treatment of metastasis from tumors of the gastrointestinal tract is considered by most to be at best, only palliative. This may be a rather nihilistic approach. Indeed the surgical literature increasingly shows that an aggressive attitude towards distant metastasis may be of benefit to some patients.

Colorectal Carcinoma is one of the increasing afflictions and is the 2nd commonest cause of death from cancer in the Western world. It accounts for 14% of cancer deaths in men and 16% of deaths in women. Put into perspective one person in five in the United Kingdom now dies from cancer and one in eight of these will die from tumors of the large bowel.

To date the best prognostic indicator for survival in colorectal disease has been based on the extent and spread of the disease. The modified Dukes' classification still remains the best prognostic tool when dealing with 5 year survival.

Based on this classification, Dukes' A, by definition, is early cancer, yet despite this there is only an 85% survival at 5 years. The prognosis is obviously worse with the B and C category. Greenway concludes that 30% of patients who undergo curative resection of colorectal carcinoma die of metastatic disease in the liver. It has also been suggested that dissemination of metastasis to extrahepatic sites such as lung and bone is frequently by secondary metastasis from deposits that have already occurred in the liver.

These findings are therefore sufficient to justify a more aggressive policy towards liver metastasis. To date chemotherapy and surgery are the possible treatment options. However before discussing such options the natural history of liver metastasis ought to be considered. Solitary or low volume liver mets can be associated with prolonged survival even if left untreated (20% 3 year survival). Few 5 year survivors have been documented by Wagner but none in the extensive series by Hughes et al and Scheele et al. Indeed such dismal results justify an aggressive treatment policy by the latter and other such as Doci and Gennari.

Liver surgery varies from extensive type of resections such as lobectomy or extended lobectomy to non-anatomical resection such as metastasectomy, the latter accounting for up to 1/3 of all liver surgery. This type of surgery is not without complications.Whilst some authors report no intraoperative deaths, post operative morbidity and mortality still remains rather high. Both recent Italian and German literature suggest a 10% mortality with an additional 13% major complication rate.

Despite extensive liver surgery, the 5 year survival remains limited to 10 - 32%. The extent of liver involvement appears to be the most important parameter related to survival. No 5-year survivors have been documented in patients with more than 50% of liver involvement at the time of resection. In contrast a significantly better result of 40% 5 year survival was achieved in patients with <25% liver involvement.

Overall 69% of all those resected die of recurrent disease. Sixty per cent of these show evidence of liver deposits either alone or in combination with other extrahepatic sites.

It may be argued that operative risks in patients with limited survival may not be justified when other modalities of treatment, such as chemotherapy, are in existence. Extensive trials with chemotherapy have been undertaken with widely varying results. Several clear points however emerge. Only 5 Fluorouracil appear to be effective in liver metastasis only when administered intrahepatically via the hepatic artery. Intravenous administration is only of value in stemming the spread of extrahepatic disease.

Considerable morbidity is still a problem associated with chemotherapy and at present the long term results may be slightly inferior to surgery.

The slightly better results of surgery over chemotherapy might be negated by the mortality associated with surgery. The overall results for both surgery and chemotherapy are not ideal yet. However careful selection and treatment of patients with small volume metastasis may result in better 5 year survival.