Multiple Myeloma Site Survey

Treatment modalities include chemotherapy, radiation therapy, and bone marrow and peripheral blood stem cell transplant.

Multiple myeloma is a neoplastic disorder characterized by the proliferation of a single clone of plasma cells, immune cells that function normally to secrete antibodies. These cells grow in the bone marrow and frequently invade adjacent bone, destroying the bone and resulting in pain and fractures. Multiple myeloma is diagnosed by the presence of monoclonal plasma cells in the bone marrow, M-protein detected in blood or urine, and bone lesions seen on imaging studies. Renal function is tested because the monoclonal proteins can lodge in the kidneys and impair kidney function.

Although common clinical findings are bone pain, fractures, hypercalcemia and renal insufficiency, patients might be diagnosed at an early stage by their family doctors because of an elevated protein level in the blood or because of anemia. Further investigation reveals monoclonal proteins, excess protein made by the malignant myeloma cells. Patients are then referred to a hematologist for further workup of the disease and subsequent treatment. The full range of myeloma diagnostic and therapeutic services is offered at the Stony Brook Cancer Center, which specializes in the treatment of the disease.

National Cancer Institute’s data indicate the median age at diagnosis to be 69 years. An increasing number of patients from the greater New York area are seeking their treatment here because of the expertise and the novel treatment available at Stony Brook Cancer Center.

Predictors of aggressive disease associated with a poor outcome are chromosomal abnormalities such as the deletion of chromosome 13, plasmablastic morphology or circulating plasma cells. An international staging system now also uses serum albumin and Beta 2 microglobulin. Tailored therapies for patients with these risk factors are offered at Stony Brook Cancer Center.

Myeloma treatment has undergone dramatic changes over the past several years with vastly superior results, longer remissions and improved survival. Novel drugs (including Revlimid® and Velcade®, which Dr. Schuster helped develop) and drug combinations have led to response rates as high as 90 to 100 percent. Stem cell transplants have helped people stay in remission for longer periods of time. Bisphosphonates, bone-strengthening drugs, help prevent the myeloma cells from attacking the bone.

Exciting research is underway at Stony Brook including testing new drugs for relapsed myeloma and designing ways to improve the results of stem cell transplants. Stony Brook’s myeloma program is one of the few in the world to offer stem cell transplants without blood transfusions for patients whose religious beliefs might not allow them to receive transfusions. These promising developments for our patients with myeloma and ongoing research have made this once rapidly fatal malignancy a much more treatable disease.

Multiple Myeloma Site Survey References:
**Multiple Myeloma: Patient Incidence**
Stony Brook Cancer Center (SBCC) vs. National Cancer Data Base (NCDB) data from 1,381 hospitals (2000-2008)

**Multiple Myeloma: Age at Diagnosis**
Stony Brook Cancer Center (SBCC) vs. National Cancer Data Base (NCDB) data from 1,381 hospitals (2000-2008)

**Multiple Myeloma: Patient Insurance**
Stony Brook Cancer Center (SBCC) vs. National Cancer Data Base (NCDB) data from 1,381 hospitals (2000-2008)

**Multiple Myeloma: Treatment Modalities**
Stony Brook Cancer Center (SBCC) vs. National Cancer Data Base (NCDB) data from 1,381 hospitals (2000-2008)

**Multiple Myeloma: Incidence by Gender**
Stony Brook Cancer Center (SBCC) vs. National Cancer Data Base (NCDB) data from 1,381 hospitals (2000-2008)

**Multiple Myeloma: Incidence by Race**
Stony Brook Cancer Center (SBCC) vs. National Cancer Data Base (NCDB) data from 1,381 hospitals (2000-2008)

**Multiple Myeloma: Five-Year Observed Survival**
Stony Brook Cancer Center (SBCC) (63 cases from 2003-2005) vs. National Cancer Data Base (NCDB) (7,766 cases from 2003 at 1,215 programs)