Solitary Plasmacytoma

To fit the strict criteria for the diagnosis of a solitary plasmacytoma, the patient must present with a single bony involvement, as demonstrated by a bone skeletal survey, and remain free of other bony site involvement for at least six months after the initial diagnosis. Unfortunately, in approximately 70 per cent of cases, the solitary form of the disease will disseminate into the more common form of multiple myeloma. With the pure solitary plasmacytoma, the serum protein electrophoresis study is completely normal in 75 per cent of cases with the remaining 25 per cent showing a mild abnormality. The age group for solitary plasmacytoma is slightly younger than that for multiple myeloma, typically before the age of 40 years. The most common sites of involvement include the spine, pelvis and proximal femur with radiographic evidence of a solitary lytic destruction of bone that may take on the appearance of a benign lesion such as a solitary form of fibrous dysplasia. Because the disease is purely lytic in nature, the bone isotope scan may be negative.

Since the disease is considered localized at first, the treatment is localized with a wide surgical resection and prosthetic replacement, with or without methyl methacrylate, followed by local radiation therapy if the margins are positive. Systemic chemotherapy is not used until the disease becomes more disseminated, as demonstrated by increased levels of abnormal myeloma protein found by serum electrophoresis studies. The prognosis for survival is quite good until the disease becomes more disseminated which is usually within three years after the initial diagnosis.