tential development of an osteogenic sarcoma, and depends upon the fact, whether or not it is possible to remove by therapeutic procedures the radioactive matter from the bones before it is able to elicit a neoplastic response. The prognosis, once the neoplastic process has become established, is absolutely infaust, especially so, as the sarcomatosis is multifocal and cannot be influenced effectively by the therapeutic measures available.

XIII. THERAPY

The therapeutic procedures indicated in chronic radium poisoning must be directed toward the removal of the radioactive material deposited in the body. Since the radium stored in the bones is present in a combination similar to that found with lead, the therapeutic management of radium poisoning has been based upon the treatment devised for the mobilization of lead from the bones, and its elimination with the urine and feces. Flinn (1927) first adopted such procedures, when he treated one of the dial painters for four days with ammonium chloride and reduced the radium content of the body from an estimated 100 micrograms to 86 micrograms.

Elaborating on this type of therapy Flinn and Seidlin administered subsequently to three cases with radium poisoning, parathormone by injection. In one case there was a loss of radioactivity of 45.6 per cent within 7 weeks, in a second case the reduction of radioactivity amounted to 57.7 per cent obtained during a corresponding period, while in the third case a decrease of 50.5 per cent was noted. Parathormone was given to these patients every other day in doses starting with 10 units and gradually rising to 50 units intramuscularly. Blood calcium determinations were performed frequently before the injection of parathormone. With a combined treatment of ammonium chloride and parathormone, Flinn noted the excretion of 1 microgram every 60 days (2,200 micromicrograms with the urine and 16,000 micromicrograms with the stool).

On account of the various disadvantages which are connected with the use of this method, Flinn turned to viosterol, beginning with a few drops orally and increasing gradually until a dose of a teaspoonful three times daily was reached. Eight patients, having a radium content ranging between 10 to 90 micrograms, subjected to this management showed a marked reduction of the radioactivity or a complete disappearance of this phenomenon in the milder cases within four years (electroscopic test), and simultaneously the radioactivity of the exhaled air decreased remarkably (in one case to one/thirty-fifth of the original value). The difficulty connected with this massive type of medication lies in the fact that there is an already damaged bone present, which undergoes under the influence of an intensive treatment of the above-mentioned type further decalcification. The administration of 20 to 30 drops of viosterol three times daily may obviate such undesirable effects, while extending the period of elimination of the radioactive substances.