CLASSICAL tic douloureux is a disease of unknown origin characterized, among other attributes, by periods of spontaneous remission. Any proposed medical therapy must therefore be scrutinized with specific attention to this factor. Previous attempts at medical relief, such as that assigned to the intake of massive doses of ferrous carbonate\textsuperscript{9,10} or to the injection of B\textsubscript{12}\textsuperscript{1,11} have failed to alter substantially the natural course of this disease. The inhalation of trichloroethylene offers at best the momentary relief obtained by a short-acting analgesic.\textsuperscript{19}

The severe pain of tic douloureux is relieved permanently only by complete section of the sensory root of the trigeminal nerve. The time-tested procedures of sensory root section by the temporal route of Spiller-Frazier\textsuperscript{25} or the cerebellar approach of Dandy\textsuperscript{7} carry virtually no mortality in experienced hands and scant morbidity. Following sensory root section there remain, however, permanent analgesia and anesthesia over the sensory domain of the fifth nerve, including the cornea. The procedure is scarcely applicable to cases of bilateral or alternating tic douloureux and can be applied to the younger age group of patients only with extreme reluctance. More peripherally placed nerve sections or alcohol injections are effective measures only for the temporary relief of the pain of tic douloureux.

More recently, decompression of the ganglion and sensory root of the fifth nerve has been proposed by Taarnhøj\textsuperscript{27} as a means of relieving tic pain and at the same time avoiding the subjective distress of sensory loss over the face and the potential danger of the loss of corneal sensitivity. The operation of ganglionlysis is a variation on this theme.\textsuperscript{21,26} Whether based upon sound premises or not, the procedure is not unlike the partial section once advocated by Frazier\textsuperscript{12} and by Dandy\textsuperscript{8} and the recurrence rate of these newer procedures has also been high.\textsuperscript{17,28}

In 1942, Napier and Sen Gupta\textsuperscript{18} described a late chronic neuropathy confined largely to the distribution of the fifth nerve which occurred as an unexpected sequel to the administration of 4:4'-diamidino-diphenyl-ethylene to patients with kala-azar. The observation was extended by Sen Gupta\textsuperscript{22} and others\textsuperscript{2,5,6,20} in patients treated for kala-azar, trypanosomiasis and blastomycosis.

The majority of such patients treated with therapeutic doses of stil-
stilbamidine developed, after a time period of 2 to 5 months after the termination of therapy, the rather rapid onset of varying degrees of hypesthesia and hypalgesia over the face and over the upper cervical sensory dermatomes as well. To the diminution of pain and touch responses in these areas was added, in a smaller percentage of cases, intense formication and burning paresthesias noticed about the central area of the face, involving particularly the nose and eyes. Such paresthesias tended to subside but slowly. When administered properly, stilbamidine is not otherwise toxic. Solutions of the drug become markedly toxic and progressively lose their therapeutic potency upon exposure to ultraviolet radiation. When such unstable solutions are used, irreversible hepatic and renal injury may occur.

At the suggestion of Dr. Frank Ford of Baltimore, Maryland, Smith and Miller treated a single elderly patient with stilbamidine in April, 1952, with a total dosage of 2.25 gm. given intravenously in 15 divided doses. Relief of pain was apparent on July 18 and this relief of pain has been maintained. The same authors subsequently reported the treatment of 16 patients with stilbamidine isethionate with excellent results in 15 and good results in 1, using a dosage schedule of 0.15 gm. per day for 14 days for a total dosage of 2.1 gm.

The present series of 41 patients were selected from a total roster of 71 patients treated in the Duke Hospital over the years 1953 and 1954 for the pain of classical tic douloureux.

The first patient was treated on April 27, 1953 and the last on August 29, 1954. The period of post-therapy observation has ranged therefore from 2 years to 9 months. Stilbamidine isethionate 0.15 gm. was freshly dissolved in 150 cc. of 5 per cent glucose and distilled water and given intravenously over a period of 1 hour. Transient shock-like reactions associated with a more rapid administration of this drug have been reported, but were not observed in this group. The course of therapy consisted of 10 daily injections for a total dosage of 1.5 gm. of the drug. In 2 patients a localized thrombophlebitis developed at the point of injection. There were no late complications. Pre-therapy observations consisted of the usual ones directed toward evaluation of a demonstrable organic cause for the tic pain and included the neurological examination, roentgenograms of the internal acoustic meatus, audiometer tests, vestibular tests and the determination of spinal fluid total protein. Electroencephalograms were done in all patients and psychological tests in a group of 8 patients. Liver and kidney function tests were carried out before and after drug therapy.

Fifteen of the patients were males and 26 females; their ages ranged from 32 to 86 years. Multiple sclerosis was present in 1 patient, marked by a progressive paraparesis, and arteriosclerotic vascular disease of the brain with hypertension was present in 13 patients. In 4 patients, the disease had manifested itself bilaterally. Six patients had had previous alcohol injections, 2 patients had had decompression of the sensory root of the fifth nerve and 2 patients had had incomplete sections of the sensory root.